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The Effects of Single-Sex Student Leadership Positions on Leadership Style Used, Perceptions of Effective Leadership, Self-Efficacy, Domain Identification, Intent to Lead in the Future, and Perceptions and Evaluations of Leaders

Submitted To

A handwritten signature in black ink, appearing to read 'Crystal Hoyt'.

Dr. Crystal Hoyt

A handwritten signature in black ink, appearing to read 'Don Forsyth'.

Dr. Don Forsyth

A handwritten signature in black ink, appearing to read 'Juliette Landphair'.

Dean Juliette Landphair

By

A handwritten signature in black ink, appearing to read 'Alyson Emrick'.

Alyson Emrick

Defended on April 21, 2006

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Running Head: EFFECTS OF SINGLE-SEX LEADERSHIP POSITIONS

The Effects of Single-Sex Student Leadership Positions on Leadership Style Used, Perceptions of Effective Leadership, Self-Efficacy, Domain Identification, Intent to Lead in the Future, and Perceptions and Evaluations of Leaders

Alyson Emrick

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### Abstract

Included in this paper are two studies, a survey study, and a vignette study. The survey research, Study 1, examined the effects of single-sex student leadership positions on leadership style used, perceptions of effective leadership, leadership self-efficacy, domain identification, and intent to lead in the future. It compared a group of male and female leaders of single-sex organizations, a group of men and women holding leadership positions in coeducational groups, and a group of male and female non-leaders. Male and female leaders reported using different leadership styles; men reported higher levels of the autocratic-task style while women reported higher levels of the democratic-relationship style. They also reported having perceptions of effective leadership that closely correlated with the leadership style used. Leaders reported higher levels of self-efficacy, domain identification, and intent to lead in the future than non-leaders. The vignette study, Study 2, examined the effects of leader's sex, leadership style, and group composition on the perceptions and evaluations of leaders. Contrasting previous literature, female leaders in the vignette study were rated more positively than male leaders.

## The Effects of Single-Sex Student Leadership Positions

Women hold fewer formal positions of leadership than men, which is a problem in our increasingly global world. In her book, “Closing the Leadership Gap,” Marie Wilson writes, “Women populate half the democracy; we should occupy half the positions of leadership – both for gender equity and because women, a natural resource, should be mined for energy” (Wilson, 2004). It is important to make use of all of our resources and knowledge to better communicate and work with diverse groups. Thomas Friedman explains in his book, “The World is Flat” that with rapid globalization, competition increases as does the diversity in the workplace (Friedman, 2005). This diversity has incredible benefits and must include diversity of sex as well as ethnicity, race, age etc. Diversity facilitates economic advantages by bringing varied points of view into the workplace and by reaching previously underserved populations with marketing strategies (Crosby, Iyer, Clayton & Downing, 2003). It is imperative that women gain access to more leadership positions in the near future not only to increase diversity but to make our society more egalitarian as well.

Equal opportunity and equal status for all citizens are principles on which the US stands. Despite this, the status of women differs from that of men in our society, which handicaps women’s efforts to attain leadership positions (Bass, 1990). Even after Title VII of the Civil Rights Act of 1964, which prohibits sex discrimination in employment, and the affirmative action program of the Equal Employment Opportunity Commission, the number of women in top management positions is still minimal (Bass, 1990). According to Catalyst, only 15.7% of corporate officers in Fortune 500 companies are women (Fortune Magazine, November 14, 2005). Females account for only 4% of top executive positions in these companies, 3% of the most highly paid officer positions, and .4% of CEO positions (Carli & Eagly, 2001). There has

been a large increase in the number of women in middle management, and women now hold 50.3% of middle management and professional positions but the representation in the highest levels is still minimal (Catalyst, 2005; Eagly & Karau, 2002).

Statistics and opinions of women in leadership positions continue to improve but have a long way to go. A comparison of executives' attitudes about women in business revealed very different perceptions in 1965 than in 1985. In the 1985 survey, executives were more likely to believe that females wanted positions of authority, and they reported feeling more comfortable working for a woman than the respondents in the 1965 survey (Sutton & Moore, 1985). Despite these improvements, women remain sparse in the upper ranks of management.

The following reviews literature on gender and leadership and introduces the research that I conducted. Study 1, through survey research, examined the ramifications of single-sex leadership experiences on perceptions of effective leadership, leadership style used, leadership self-efficacy, domain identification, and intent to lead in the future. Study 2, a vignette study, examined the effects of the leader's sex, the leadership style used, and the group composition, either single-sex or coeducational, on leader perception.

*Gender Stereotypes and Leadership.* One proposed reason for the sparse number of women in upper level positions is the existence of gender-based stereotypes in the leadership domain. These stereotypes suggest that characteristics associated with formal leadership are more agentic, which are more closely associated with men and masculine traits than with women and feminine traits (Martell & DeSmet, 2001; Eagly & Johnson, 1990; Bass, 1990). Men are associated with agentic traits such as assertive, controlling, dominant and confident. Communal characteristics, on the other hand, are ascribed more strongly to women. Communal characteristics include affectionate, kind, and sympathetic (Eagly & Karau, 2002). Brenner's

(1970) nationwide survey of managers suggested that gender-based stereotypes in the leadership domain are present. The survey found that the four most important traits for upper-level leadership positions were deemed more likely to be characteristic of men than of women (Bass, 1990). Similarly, 1,161 students chose masculine rather than feminine traits on the Bem Sex-Role Inventory to describe necessary characteristics of a good manager, president, and even female political activist (Bass, 1990).

Masculinity and femininity have various sets of stereotypical characteristics associated with them depending on the culture; these characteristics shape gender roles. Gender roles are beliefs about the characteristics, attributes, and traits of men and women. Gender roles encompass both descriptive and injunctive norms. Descriptive norms are the consensual expectations about what members of a group actually do, and injunctive norms are the expectations about what a group of people should or ought to do (Eagly & Karau, 2002). In the US, the male gender role is more closely paralleled to the expectations and agentic characteristics of leaders than is the female gender role.

Role congruity theory suggests that the perceived incongruity between the female gender role and traditional concepts of the leadership role results in two types of prejudices. The first is that men are deemed more favorable than women as potential leaders. This prejudice stems from descriptive norms of gender roles, which state that leadership ability is more stereotypical of men than of women. The second form of prejudice is that social perceivers who endorse traditional gender roles evaluate the behavior used to carry out a leadership role less favorably when it is done by a woman than when it is enacted by a man (Eagly & Karau, 2002). According to injunctive norms, leadership behavior is not consistent with the way women ought to act, so it is less desirable in women than it is in men. This results in a more harsh evaluation of female

leaders. Men are more often perceived as leaders, more likely to enact behaviors traditionally associated with leadership, and emerge as leaders more often than women. This is because people more readily accept agentic behavior from men than from women. Role congruity theory suggests that it is more difficult for women to attain and succeed in leadership positions than it is for men.

*Gender and Leadership Styles.* Once women overcome the obstacles to attaining leadership positions, they are faced with threats from two directions when in a leadership role. Female leaders can conform to their gender role and act feminine, which fails to meet the requirements of their leadership role, or they can conform to their leadership role and act more masculine, which fails to meet their gender role requirements (Eagly & Karau, 2002). Women placed in this difficult situation are pressured to find the most appropriate leadership style, one that balances the communal traits required by their traditional gender role and the agentic traits associated with their leadership role.

Socialization into leadership roles and selection for the roles suggest that females and males who occupy the same position should not differ greatly (Eagly & Johnson, 1990). However, Eagly and Johnson conclude that ingrained gender differences in traits and behavioral tendencies, a spillover of gender roles onto organizational roles, as well as subtle differences in the structural position of women and men could cause leadership behavior to be somewhat sex-differentiated even when occupants of the same organizational role are compared (Eagly & Johnson, 1990). In their meta-analysis, Eagly and Johnson (1990) found significant effects for democratic leadership and transformational leadership -- two “feminine” leadership styles -- such that female leaders used both of these styles to a larger extent than male leaders (Van Engen &

Willemssen, 2004). The gender difference in the democratic leadership style is a rather stable phenomenon found across a variety of studies.

The primary difference between autocratic and democratic leadership lies in the amount of control over decision-making leaders give to their followers. According to Bass and Stogdill's handbook of leadership, authoritarian versus democratic leadership refers to the way power is distributed, whose needs are met, and how decisions are made (Bass, 1990). Democratic leadership can involve either participative (shared) or consultative decision making. Participative leaders make decisions with their group members and often use a majority rules process or a similar social decision making strategy. Consultative leaders make the final decisions but take into consideration the opinions of their followers (Van Vugt, Jepson, Hart & De Cremer, 2004). Autocratic leaders on the other hand, discourage followers from participating in decision-making (Eagly, Makhijani & Klonsky, 1992).

The group value model suggests that the leadership style used by the leader communicates important information about the relationships within the group (Bass, 1981). In contrast to autocratic leaders, democratic leaders convey to their group members that their input is important and valued. Female leaders are thought to be more attentive to upward communication from their followers, while male leaders are expected to be more focused on downward communication and directiveness (Bass, 1981). This tendency for women leaders to take into consideration information from their group members is consistent with democratic leadership. Directiveness and delegation that male leaders tend to use are characteristics of autocratic leadership. This greater tendency for women to adopt a democratic style of leadership and for men to use an autocratic style relates to gender role stereotypes (Eagly & Johnson, 1990).

Agentic stereotypes that are ascribed to men suggest that men are more controlling, dominant, autocratic, and directive than women (Eagly & Johnson, 1990).

*Gender and Leadership Evaluation.* Scholars have documented an aversion to autocratic leadership in many studies (Nielsen & Miller, 1997; Peterson, 1997; Rutte & Wilke, 1985; Samuelson, 1993; Van Vugt & De Cremer, 1999). Followers are unhappy with the lack of control over decision making. However, it is still more acceptable for men to adopt an autocratic style than women (Eagly, Makhijani & Klonsky, 1992). An autocratic and directive style used by a woman disrupts traditional expectations and is often met with resistance from followers. Skepticism expressed about women in leadership roles may be intensified if women lead in an authoritative manner because it violates gender-role prescriptions of women. A participative and collaborative style of leadership may enable female leaders to gain the acceptance of skeptical followers because it reduces women's overall disparity between the female gender role and their leadership role (Eagly, Makhijani & Klonsky, 1992). However, women tend to lose authority if they use a distinctively feminine style of leadership in a male-dominated discipline. Women who maintain their role in male-dominated positions are probably forced to adopt styles typical of males (Eagly & Johnson, 1990). Women must constantly try to balance the benefits of a more democratic style with the advantages of a more authoritative approach. If a female leader takes on a passive, participative style of leadership, she is criticized for being too passive, but if she adopts an autocratic, task-oriented style, she is seen as too aggressive and too masculine (Bass, 1981). Men, however, are freer to lead in an autocratic and non-participative manner if they desire because they are not constrained by followers' attitudinal bias about biological sex and leadership (Eagly, Makhijani & Klonsky, 1992). Women who fill positions of leadership are

forced to make special adjustments that their male counterparts are not required to make (Bass, 1990).

Scholars interpret research on leadership and gender roles in various ways. Eagly, Makhijani and Klonsky (1992) discuss contradicting research on the evaluation of male and female leaders in their meta-analysis. Powell and Butterfield (1982) suggest that female leaders are not evaluated or perceived any differently from male leaders in the same roles, performing the same behavior (Eagly, Makhijani & Klonsky, 1992). Contradicting this, Van Fleet and Saurage (1984) argue that considerable research suggests that women are evaluated subjectively less favorably than their male counterparts enacting identical behavior. Eagly, Makhijani, and Klonsky's review suggests that people do in fact evaluate female leaders more negatively than equivalent male leaders.

Since successful female leaders tend to adopt agentic traits consistent with leadership characteristics and fail to display feminine, communal traits, those who endorse traditional gender roles evaluate them negatively for violating their gender role (Eagly & Karau, 2002). This negative evaluation of women is particularly strong when the style used is autocratic or directive. The devaluation of women leaders is greater when the role was male-dominated and when evaluators are male (Eagly, Makhijani & Klonsky, 1992). Female leaders' behavior may also be regarded as more extreme than that of male counterparts. They may be perceived as more dominant and controlling (Eagly, Makhijani & Klonsky, 1992). The fact that males evaluate female leaders more harshly is consistent with the reasoning that men, as the sex ascribed the higher status in our society, have more to lose by accepting women into leadership positions (Eagly, Makhijani & Klonsky, 1992). The tendency for female leaders to be evaluated more negatively than males is more apparent in recently published research. This research



contradicts any assumptions that stereotypes and prejudices against female leaders are decreasing with time.

Petty and Lee (1975) also found that leaders are evaluated differently based on sex. Male subordinates under female leaders rated the leader more harshly than the female subordinates did. The male subordinates reported the leader as being low in consideration, thoughtfulness, and kindness, and high in structure. Males were also more dissatisfied with female leaders who promoted hierarchy, which is perceived as masculine, than with female leaders who were considerate, which is categorized as a feminine trait (Bass, 1990). This further supports that women are evaluated more harshly when they are violating their gender role. Similarly, Ridgeway (1982) found that female confederates were more successful in exerting their influence in a group of men when they were supportive, considerate, and friendly than when they were emotionally distant and self-confident (Eagly & Karau, 2002). These findings are consistent with the idea of gender-role spillover: a carryover of gender-based expectations for behavior into the workplace. It suggests that women are expected to act according to their gender role by displaying feminine characteristics in the workplace. In the absence of these appropriate feminine characteristics, they are disliked and evaluated more harshly in the workplace. The findings also support the role congruity theory (Eagly, Makhijani & Klonsky, 1992).

In all-female settings, it may be more acceptable for women to use a less democratic style than it is in a mixed-sex setting. Kushell & Newton (1986) found that women are less satisfied with autocratic leaders than men are (Foels, Driskell, Mullen & Salas, 2000). However, female leaders are more harshly evaluated by male subordinates than female subordinates, so female leaders of single-sex groups may be freer to lead in a less democratic manner without being

negatively evaluated. Also, the effect of leadership style on satisfaction becomes greater as the group becomes predominately male (Foels, Driskell, Mullen & Salas, 2000). This further suggests that women leading all-female groups may be able to adopt a directive style without being harshly evaluated. Women may not be able to lead in an autocratic style with agentic characteristics in mixed-sex groups because they are not valued or reinforced by men (Lyons, Saltonstall & Hanmer, 1990; Sagaria & Johnstrud, 1988).

*Gender, Leadership, and Educational Institutions.* Barriers to leadership faced by women exist in educational institutions. Societal gender roles that make it more difficult for a woman than a man to attain leadership positions are evident in schools. In strictly coeducational environments, there is under-representation of women in student leadership positions (Whitt, 1994; Astin, 1993). Stereotypical expectations of women, structural obstacles in the college environment to overcoming these expectations, and self-doubts of women all perpetuate this under-representation. Studies have shown a need for an environment that promotes leadership development, affirmative opportunities for women to develop and practice leadership skills -- including single-sex environments -- and continual environmental assessment (Whitt, 1994).

Treating male and female students as though they have identical needs in college is not beneficial to either group and may be detrimental to female students (Whitt, 1994). Promoting similarity between women and men may validate norms of the dominant social group, which are more beneficial to men and have been in-attentive to women (Whitt, 1994). Forrest, Hotelling and Kuk (1984) argue that a "null environment," an absence of encouragement for women, can be just as damaging to females as discouragement. Societal norms already discourage women, so schools do not have to be overtly hostile environments to deter women from running for leadership positions. Forrest, Hotelling, and Kuk argue that educational institutions with a null

environment that do nothing to reduce the disadvantage of female students may in fact be reinforcing the handicap women have upon entering college. This handicap refers to internal and external barriers such as descriptive and injunctive stereotypes and messages sent to women about their abilities and talents. Coeducational institutions that provide women with the opportunity to run for leadership positions against men are null environments and discourage women simply by not encouraging them.

All-female institutions provide leadership opportunities for women that are devoid of societal gender roles or stereotypical expectations. In all-female institutions women inevitably fill leadership roles as they have every opportunity and not merely “equal opportunity” as they do in coeducational institutions. Female leaders have often reported past leadership experiences in single-sex organizations as important (Astin & Leland, 1991). Sagaria (1988) found that because programs designed solely or primarily for women focus on supporting and affirming women’s aspirations and accomplishments, they are the most helpful in developing women’s leadership abilities. The Carnegie Commission suggests that leadership positions in campus organizations develop leadership skills, (Miller-Bernal, 1993) and Keohane (1984) writes that nothing prepares for leadership like the experience of leading (Whitt, 1994).

Some research suggests that not only do single-sex institutions provide women with leadership positions but they actually help diminish gender-based stereotypes about leadership as well. Girls in single-sex schools were less likely to hold stereotyped sex role attitudes than those attending coeducational schools (Lee & Byrk, 1986). The students in all female schools were less likely to show gender stereotypical beliefs in their second year than those in coeducational schools. Similarly, in another experiment, women who were in environments that exposed them to female leaders did not express automatic stereotypic beliefs about their in-group (Dasgupta &

Asgari, 2004). This research provides correlational evidence suggesting that counterstereotypical leaders influence automatic gender related stereotypes. Decreasing the incongruity between leadership roles and female gender roles increases the accessibility of women when people think of who should occupy leadership positions. This supports Eagly's social role theory of sex differences in social behavior, which maintains that as a general tendency, people are expected to participate in activities that are consistent with their culturally defined gender roles (Eagly, Karau & Makhijani, 1995). People's observations of the unequal distribution of women and men in various social roles maintain the culturally defined gender stereotypes (Dasgupta & Asagari, 2004). These beliefs change when people are exposed to women occupying more counterstereotypic roles. Single-sex institutions provide successful female leaders who can act as role models and change cultural gender roles (Tidball, 1973; Umbach, 2004). Dasgupta and Asgari conclude that women's automatic gender stereotypes about their ingroup can be undermined and changed if they are placed in an environment where women hold counterstereotypic leadership roles, suggesting benefits of single-sex schools. While leadership characteristics are predominately masculine or agentic, leaders in single-sex organizations may view leadership in a different light.

There is also research that suggests no advantages of single-sex schools over coeducational institutions. Shapka and Keating (2003) concluded that the effects of single-sex schooling on academic achievement and self-esteem are equivocal and found no consistent pattern. Similarly, Marsh (1989) found no significant advantages to single-sex schools in regards to academic performance or attitudes and behaviors. Without increased self-esteem or lowered sex role attitudes, female students may not be any more likely to pursue leadership positions after graduation than their peers in co-educational settings. Riordan (1994) stated that

the impact of single-sex schooling continues to be an unresolved empirical question. Despite these arguments, it is important to create environments, in both single-sex and coeducational institutions, that encourage and support women students' leadership development.

*Leadership Self-Efficacy.* Self-efficacy is defined as “judgments of capabilities to organize and execute courses of action required to attain designated types of performances” (Murphy, 2002). High self-efficacy has been shown to lead to improved performance in a number of domains and situations. Heightened self-efficacy is also related to increased motivation, which could then affect levels of aspiration, goal setting, and perseverance in the face of challenge (Chemers, 2002).

Leadership efficacy is a resource that allows people to deploy their knowledge. As the leadership situation becomes more challenging, the more useful leadership efficacy becomes (Chemers, 2002). There is strong support for the argument that leadership self-efficacy is a good indicator of group and organizational performance (Chemers, 2002). Murphy writes that increased self-efficacy for leadership should increase a leader's ability to succeed under stressful circumstances. She also argues that leadership efficacy refers to one's belief in his or her ability to lead and thus should relate to leadership effectiveness (Hoyt, Murphy, Halverson & Watson, 2003).

Research suggests that, especially for female students, leadership experience helps develop a sense of competence and self-confidence (Astin & Leland, 1991; Guido-DiBrito & Batchelor, 1988). Astin and Kent (1983) argue that women who hold leadership positions in college develop a greater level of self-esteem and leadership self-efficacy than those who do not (Whitt, 1994). This research illustrates the importance of student leadership positions for the development of self esteem, confidence, and leadership self-efficacy.

*Study Overview and Hypotheses.* The University of Richmond created a system that provides an equal number of leadership positions for males and females, supporting leadership development of both women and men. University of Richmond college coordinate system is comprised of Westhampton College for the women and Richmond College for the men. From 1914 until the early 1970s, the two colleges operated separately in almost all respects. Despite the unification of the two colleges, many aspects of the University are still separated by sex. There are arguments for keeping the Dean's offices, housing, and student governments separated by sex as they are currently but also arguments for mixing the females and males more so than they are now. Proponents of the colleges argue that the gender-based resources for students are vital, while critics argue that such a system is archaic and prevents better relations between men and women.

The distinction between Westhampton College and Richmond College provides the students of the University of Richmond with many benefits not found on other coeducational college campuses. The distinctive coordinate college structure offers both men and women opportunities for personal, intellectual, and leadership development. For example, having two Dean's offices enables the Deans to address areas of student concern more readily and offer more personal attention to students. In addition, each college has its own student government. Dividing the student government into Westhampton College Government Association (WCGA) and Richmond College Student Government Association (RCSGA) allows more students to hold a leadership position; it also creates a unique leadership situation in that it is single-sex within a coeducational environment.

*Study 1.* In regards to the leadership style used by female leaders, I presented two contrasting hypotheses. I hypothesized that because males tend to evaluate women more

harshly, women would report higher levels of the autocratic style when leading single-sex organizations than women leading mixed-sex groups. However, Michael A. Hogg suggests through social identity theory of leadership that the leader is the person who is most prototypical of the group. The most prototypical person is able to exercise leadership and have influence within the group (Hogg, 2001). This suggests that women leading all-female groups will actually report a more democratic style than those leading coeducational groups since women's gender roles are more communal and consistent with democratic leadership. In accordance to this prototypicality argument, I hypothesized that women leading single-sex groups would report higher levels of the democratic style and lower levels of the autocratic style. Consistent with the prototypicality argument, I hypothesized that males would report higher levels of the autocratic style in all-male groups than in coeducational groups.

In regards to the perception of effective leadership, I hypothesized that perceptions of effective leadership would be closely correlated with self-reported styles of leadership. I hypothesized this for both males and females in both single-sex and coeducational organizations.

In accordance with past research, I hypothesized that both male and female leaders would report higher levels of leadership self-efficacy than non-leaders. I hypothesized that the higher levels of leadership self-efficacy would be seen for both leaders of single-sex and mixed-sex organizations.

*Study 2.* Consistent with role congruity theory, I hypothesized that respondents would evaluate male leaders more positively than female leaders overall. Male leaders have more freedom to use an autocratic style in both single-sex and coeducational groups than women without being harshly evaluated so I hypothesized that autocratic women would be more negatively evaluated by respondents than autocratic men. However, because of the negative

views of autocratic leadership in general, I hypothesized that respondents would evaluate male leaders of both single-sex and coeducational groups using the democratic style more positively than male leaders using an autocratic one.

Since women leaders are evaluated more harshly by males than by females and are less likely to be accepted by males than by females when using an autocratic style, I hypothesized that women would have more freedom to lead autocratically in a single-sex organization without being negatively evaluated than in a coeducational group. In other words, I hypothesized that respondents would rate autocratic female leaders more negatively in coeducational groups than in all-female organizations. However, I also hypothesized that women would be rated more positively when leading democratically than when leading autocratically, in both single-sex and coeducational groups.

## Method

### Study 1

#### *Participants*

One hundred and fifty-six undergraduate students enrolled in the University of Richmond completed the questionnaire packet. Respondents were either leaders of coeducational organizations, leaders of single-sex groups, or non-leaders. Twenty respondents were female leaders of coeducational groups and twenty respondents were male leaders of coeducational organizations. Fifty-two respondents were women holding a leadership position in a single-sex organization and twenty were men holding leadership positions in all male groups. The control group consisted of twenty-six female non-leaders and eighteen male non-leaders. Respondents were recruited during their group meetings by being informed that they would be entered in a



raffle to win an iPod Nano as well as a number of fifty-dollar gift certificates to local restaurants. The organizations targeted were coeducational and single-sex student governments, coeducational and single-sex Greek organizations, coeducational and single-sex interest groups, coeducational political interest groups, and coeducational religious interest groups. All organizations represented are listed in Appendix A.

### *Measures*

A copy of the questionnaire packet in its entirety is included in Appendix B.<sup>1</sup>

*Demographics.* The demographics page asked for background information such as participant's sex, high school information, parent's education, and parent's employment. In the University of Richmond information section, participants reported their majors and minors, their grade point averages, and their year in school. In the last section, data about the student organization was reported. Organization name and number of male and female members was recorded. All respondents were asked for previous leadership experience information and the leaders were asked how long they had been holding their current position, how they attained the role, and if elected, how many people they ran against. The consent form and demographics page for both leaders and non-leaders are in Appendix B.

*Behavior Categories.* This eight item measure was a modified version of the Fourteen Categories of Leadership Behavior, which is used to measure perceptions of effective leadership behaviors (Martell & DeSmet, 2001). The modified eight item measure asked participants to report the extent to which they used the behavior categories in their own leadership. Respondents answered using a 9-point Likert-type scale ranging from -4 to 4. Example behaviors include "Friendly – befriending and forming positive relationships with group members," "Mentoring – facilitating the skill development and advancements of group

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<sup>1</sup> Not all data gathered is discussed in this thesis.

members,” and “Monitoring – evaluating the performance of group members and the organizational unit for progress and quality and detecting potential threats and opportunities.” A complete list of the eight items is in Appendix C.

*Effective Leadership Style.* This thirty-five item measure asked participants to report to what extent they believed the style described was important for effective leadership. Possible responses ranged from *not at all important*, -3, to *extremely important*, 3, on a 7-point Likert-type scale. The items include “task style” statements such as “The leader provides a plan for how work is to be done” and “The leader defines role responsibilities for each group member.” Items also include “relationship style” statements such as “The leader shows concern for the personal well-being of others” and “The leader helps group members get along.” The task and relationship items were adapted from the directive and supportive items from the Path-Goal Leadership Questionnaire (Northouse, 2001). Directive leadership can be paralleled to the task style of leadership. Both styles characterize leaders who give subordinates instructions about their tasks, detail how it is to be done, and set deadlines. Supportive leadership is similar to the relationship style of leadership. Supportive and relationship focused leaders are friendly, approachable, and attend to the well-being and human needs of subordinates. The next leadership style assessed in this questionnaire was the autocratic style. “Autocratic style” statements include “The leader uses fear to get tasks accomplished” and “Organization goals are dictated.” The last style evaluated in this questionnaire was the democratic style. “Democratic style” statements include “The leader has trust in group members” and “Group members’ ideas are sought.” The autocratic and democratic items were adapted from the Profile of Organizational Characteristics (POC), which is used to assess organizations (Bass, 1990). This questionnaire is in Appendix D.

For analyses of these data, the task, relationship, autocratic, democratic scales were run separately. Democratic and relationship statements showed the same pattern of results so they were combined into the Democratic-Relationship style, here on out referred to as the D-R style. All items used in the D-R style measure are listed in Appendix E. The same was true of the autocratic and task items so they were also combined and will now be referred to as the A-T style. The measures used to determine levels of the A-T style can be seen in Appendix F. These scales were created for both perceptions of effective leadership and for leadership style used.

*Leadership Style Used.* This thirty-five item measure included the same statements as the Effective Leadership Style questionnaire. The only adaptation was that the statements were changed to first person. Respondents were asked to record the extent to which they used the various styles by indicating agreement with statements from -3, *strongly disagree*, to 3, *strongly agree*. Example statements include, “I show confidence in my group members” and “I use threats when necessary.” A complete list is in Appendix G.

*Self Efficacy.* This eight item measure was developed by Murphy (1992) to measure individuals’ confidence in their general leadership abilities. Respondents were asked to rate their leadership abilities on a 7-point Likert-type scale ranging from *strongly disagree*, -3, to *strongly agree*, 3. Example statements include, “In general, I am very good at leading a group of my peers” and “I know what it takes to keep a work group running smoothly.” A complete list can be found in Appendix H. Past studies have found reliability ranging from .75 to .86 and convergent and discriminant validity with measures such as self-esteem and self-ratings of perceived leadership experience (Murphy, 1992; Murphy & Ensher, 1999; Murphy, Chemers, Kohles & Macaulay, 2003).

*Domain Identification.* This seven item measure asked respondents to report the extent of their identification with the leadership domain. Statements were modified from a scale used by Hoyt and Blascovich to assess leadership identification (Hoyt & Blascovich, 2006). Response options ranged from *strongly disagree* to *strongly agree* on a 7-point Likert-type scale from -3 to 3. Example statements include, “Leadership is important to me” and “I am a leadership-oriented person”. A complete list of items is in Appendix I.

*Future Leadership.* In this five item scale I asked respondent to report the extent to which they intend to lead in the future. Response options were on a 7-point Likert-type scale from -3 to 3 and ranged from *strongly disagree* to *strongly agree*. Example statements include “I would like to have a leadership position during my career” and “I plan to hold future leadership position.” A list of all five items is in Appendix J.

### *Procedure*

I used the most updated list from the Student Activities Office of student organizations on the University of Richmond campus to find and contact the leaders of all of the coeducational and single-sex student governments, coeducational and single-sex Greek organizations, coeducational political interest groups, and coeducational religious interest groups. I made appointments to attend the meetings of the groups I received responses from. During the meetings I made an announcement explaining my research, describing who was eligible to participate, and stating what the incentives were. All those interested were asked to stay after the meeting. Once the group members who were either not eligible or not interested left, I handed out the questionnaire packets and writing utensils and read the instructions. The only difference between the packets given to the leaders and those given to the non-leaders was the amount of organization information gathered on the demographics page. For example, non-leaders were

not asked to indicate how long they held their position or how it was attained. Once the respondents were done, I collected the questionnaires and pencils and thanked them for their time. A script of the research instructions is in Appendix K. Convenience sampling was used for some of the non-leader respondents to increase the number of respondents in the control groups. However, the same script was used so they received the same explanation and instructions as the respondents who completed the questionnaires after meetings.

## Study 2

### *Participants and Design*

One hundred and twelve undergraduate students at the University of Richmond responded to this vignette study. This vignette study was a 2x2x2 factorial. The independent variables were leader's sex, either male or female, leadership style used, either autocratic or democratic, and composition of the group, either single-sex or coeducational.

### *Measures*

*Vignettes.* These vignettes included hypothetical emails from leaders on campus, to their group members. The leadership styles in the vignettes were adapted from the manipulations of leadership style used in the study entitled "Autocratic leadership in social dilemmas: A threat to group stability" (Van Vugt, Jepson, Hart & De Cremer, 2004). The hypothetical emails included in the vignettes were modified from the autocratic leader condition and the democratic leader condition. The manipulation check for leadership style in the Van Vugt study indicated that they did in fact manipulate style in the intended manner. The group composition was established in the vignettes by stating that the email was sent to either "all of the women of Westhampton College Government Association, the all female student government," "all of the men of Richmond College Student Government Association, the all male student government," or "all of

the men and women of the College Government Association, the coeducational student government.” The order of the words “men and women” in this last example were alternated to control for any effects of the order. The sex of the leader was established by stating in the email either, “My name is Ashley” or “My name is Matthew.” The names Ashley and Matthew were chosen because they were both the third most popular names given to female and male newborns respectively in the U.S. in 1984, they both have two syllables, and they are not the actual names of the presidents of any student governments on this campus. All eight vignette conditions: female, single-sex, autocratic; female, single-sex, democratic; female, coeducational, autocratic; female, coeducational, democratic; male, single-sex, autocratic; male, single-sex, democratic; male, coeducational, autocratic; and male, coeducational, democratic are included in Appendix L.

*Evaluation of Leader.* This fifteen item measure asked respondents to rate the leader in the vignette on a 7-point Likert-type scale ranging from -3, *strongly disagree*, to 3, *strongly agree*. Example statements include “This leader is effective” and “I would like to be a member of this group.” A complete list of items is included in Appendix L.

*Demographics.* Respondents were asked to record their sex, their year in school, and current leadership position information. Demographic questions are included in Appendix L.

### *Procedure*

Students in the campus dining hall during dinner were asked table by table if they would fill out a quick questionnaire. Those who agreed were given a vignette and a pencil and asked to respond in silence. Once the questions were answered, I collected the vignettes and the pencils and thanked the respondents for their time.

## Results

## Study 1

Scale correlations and Cronbach's  $\alpha$  reliabilities can be found in Table 1. The Cronbach's  $\alpha$  reliabilities are along the lowest diagonal line. All scale reliabilities are adequate.

Table 1: Intercorrelations Among Study Variables and Cronbach's Alpha Reliabilities

	1	2	3	4	5	6	7
1. Self – Reported D-R Style	.87	.006	.673**	.097	.466**	.254**	.189*
2. Self – Reported A-T Style		.86	.118	.714**	.185	.308**	.249**
3. Effective D-R Style			.87	.263**	.456**	.278**	.268**
4. Effective A-T Style				.82	.142	.192*	.096
5. Self-Efficacy					.85	.565**	.433**
6. Domain Identification						.89	.742**
7. Intent to Lead in the Future							.92

\* correlation is significant at the 0.05 level (two-tailed)

\*\* correlation is significant at the 0.01 level (two-tailed)

*Self-Reported D-R style.* To test if there is a difference in self-reported use of democratic-relationship style across sex or organization composition, I conducted an ANOVA. The Univariate Analysis of Variance with two independent variables, sex and composition, on the dependent variable, self-reported degree of D-R style, revealed a main effect of sex. Women reported a higher degree of D-R style use ( $M = 2.27$ ;  $SD = .41$ ) than men ( $M = 2.01$ ;  $SD = .60$ ),

$F(1, 107) = 6.00, p = .02$ . There was no main effect for composition. There were similar levels of D-R style in single-sex and coeducational organizations. There was no interaction between composition and sex either, see Figure 1.

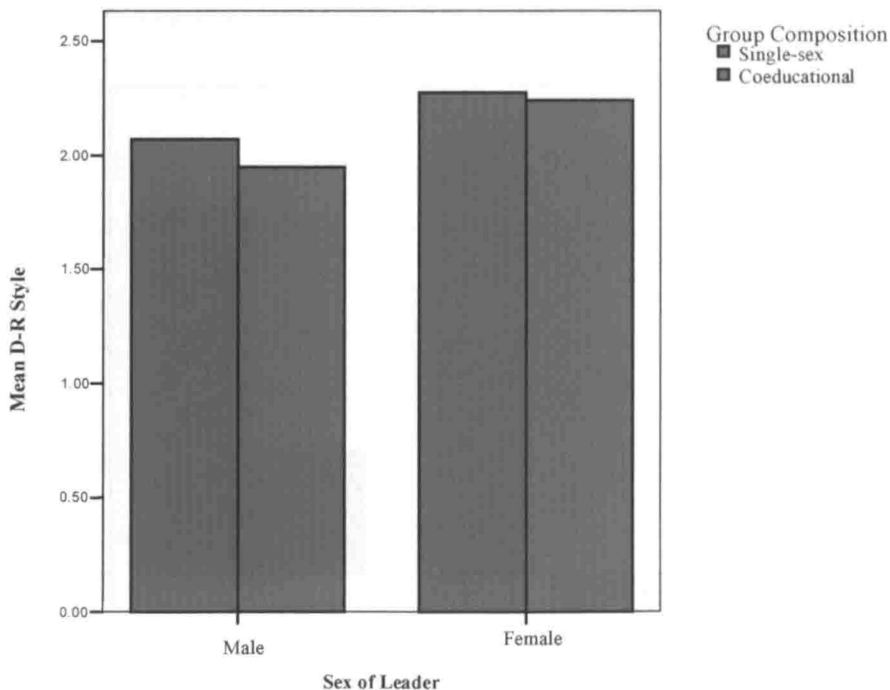


Figure 1: Self-Reported D-R Style as a Function of Leader Sex and Group Composition

*Self-Reported A-T style.* To test if there is a difference in self-reported use of autocratic-task style across sex or organization composition, I conducted an ANOVA with two independent variables, sex and composition, on the dependent variable, self-reported level of A-T style. It revealed a main effect for both sex and composition. Male leaders reported higher levels of A-T style ( $M = .54$ ;  $SD = .82$ ) than women ( $M = -.06$ ;  $SD = .77$ ),  $F(1, 106) = 16.62, p < .001$ . The composition main effect showed higher levels of A-T style in single-sex organizations ( $M = .23$ ;  $SD = .82$ ) than in coeducational groups ( $M = .02$ ;  $SD = .85$ ),  $F(1, 106) = 6.05, p = .02$ . Although, no significant interaction was found between sex and composition, the means seemed to indicate



that the composition effect was being driven by the males so I conducted pairwise comparisons. Women and then men were analyzed to reveal that men reported significantly higher levels of A-T style in single-sex organizations ( $M = .80$ ;  $SE = .17$ ) than in coeducational organizations ( $M = .27$ ;  $SE = .17$ ),  $F(1, 106) = 4.83$ ,  $p = .03$  but women did not, see Figure 2.

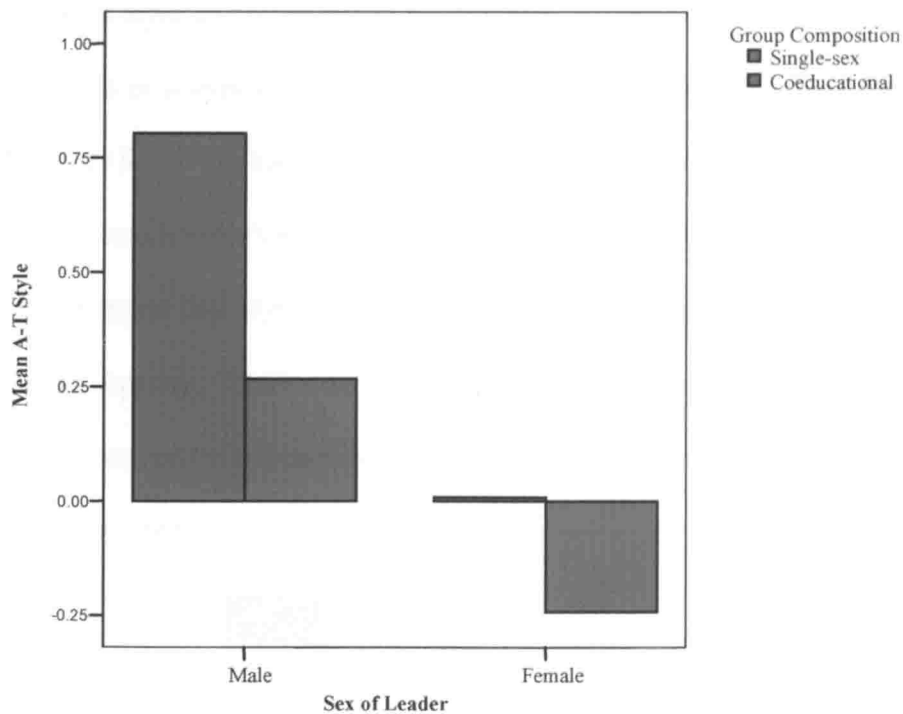


Figure 2: Self-Reported A-T Style as a Function of Leader Sex and Group Composition

*Self-Reported v. Effective D-R style.* To test if self-reported leadership style is closely correlated with leadership style perceived as effective, I ran correlations between self-reported D-R style levels and levels of D-R style thought effective. They revealed that perceptions of effective levels of D-R leadership style were closely correlated with self-reported levels of D-R leadership style  $r(111) = .67$ ,  $p < .001$ , see Table 1.

*Self-Reported v. Effective A-T style.* Similarly, correlations between self-reported levels of A-T style and levels of A-T style thought effective revealed that perceptions of effective

levels of A-T style were highly correlated with self-reported levels  $r(110) = .71, p < .001$ , refer to Table 1.

*Discrepancy between Perceived Effective levels and Self-Reported levels of D-R style.*

Discrepancy scores for D-R style were calculated by subtracting self-reported D-R style levels from D-R style levels perceived as effective. To test if there is a difference in discrepancy scores across sex or organization, I conducted an ANOVA. A main effect for sex was revealed. Men ( $M = .22$ ;  $SD = .42$ ) had more discrepancy between perceived effective levels of D-R style and self-reported levels than women ( $M = .06$ ;  $SD = .35$ ),  $F(1, 107) = 3.99, p = .05$ . Men were less likely to enact D-R style to the extent to which they reported it important. Women did not have this discrepancy. There was no main effect for composition and no significant interaction between sex and composition, see Figure 3.

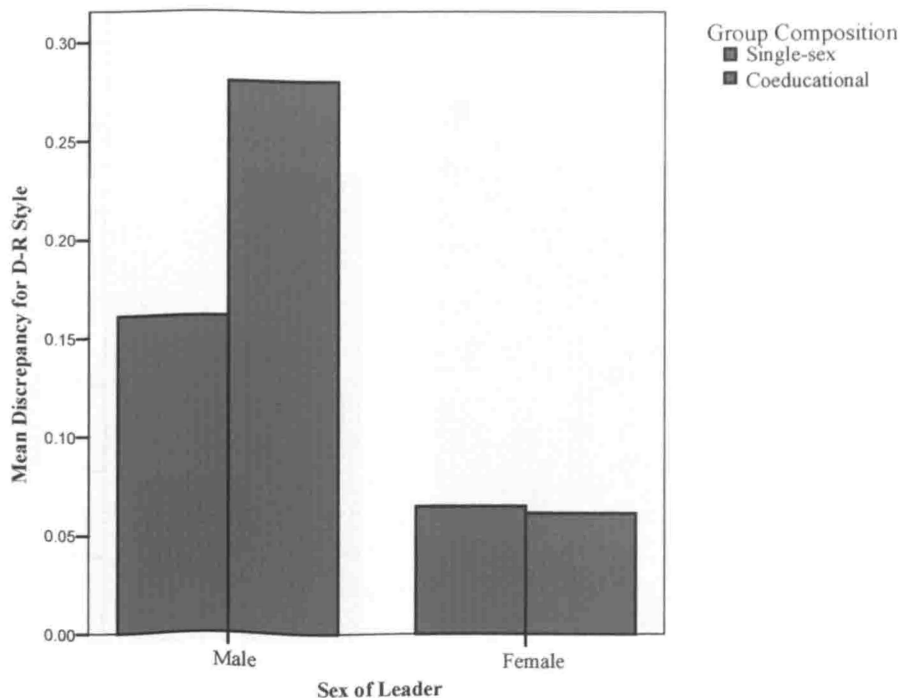


Figure 3: Discrepancy for D-R Style as a Function of Leader Sex and Group Composition

*Discrepancy between Perceived Effective levels and Self-Reported levels of A-T style.*

Discrepancy scores for A-T style were also calculated by subtracting self-reported A-T style levels from A-T style levels perceived as effective. To test if there is a difference in discrepancy scores across sex or organization, I conducted an ANOVA. The ANOVA revealed a marginal effect of sex and a marginally significant interaction between sex and composition of the group. Men reported lower levels of discrepancy between the level of A-T style thought effective and self-reported levels ( $M = .37$ ;  $SD = .56$ ) than women ( $M = .61$ ;  $SD = .60$ ),  $F(1, 106) = 3.54$ ,  $p = .06$ . There was a marginally significant interaction  $F(1, 106) = 3.14$ ,  $p = .08$ . I completed pairwise comparisons, which revealed a marginally significant effect of composition for men but not for women. Men showed less discrepancy in single-sex organizations ( $M = .19$ ;  $SE = .13$ ) than in coeducational groups ( $M = .54$ ;  $SE = .13$ ),  $F(1, 106) = 3.77$ ,  $p = .06$ , see Figure 4.

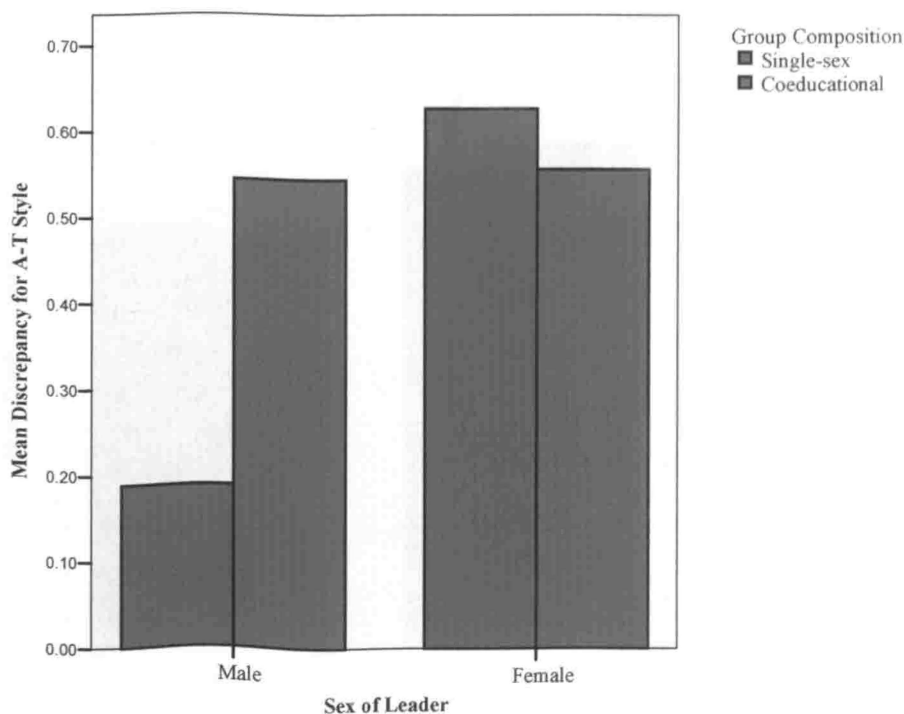


Figure 4: Discrepancy for A-T Style as a Function of Leader Sex and Group Composition

*Self-Reported Leadership Behaviors.* To test if there are differences in self-reported use of leadership behaviors across sex and group composition, I conducted ANOVA tests on all behaviors. First I will report main effects of sex, then main effects of group composition, and lastly, I will report interactions.

Sex differences: An ANOVA revealed a sex effect for friendly behavior and mentoring behavior. Women ( $M = 3.23$ ;  $SD = 1.19$ ) self-reported acting friendly to a significantly greater extent than men ( $M = 2.74$ ;  $SD = 1.35$ ),  $F(1, 106) = 4.00$ ,  $p = .05$ . There was no effect of group composition and no interaction between sex and composition, see Figure 5. Men ( $M = 2.18$ ;  $SD = .91$ ) self-reported mentoring more than women to a marginally significant degree ( $M = 1.62$ ;  $SD = 2.13$ ),  $F(1, 106) = 3.52$ ,  $p = .06$ . There was no composition effect and no interaction, see Figure 6.

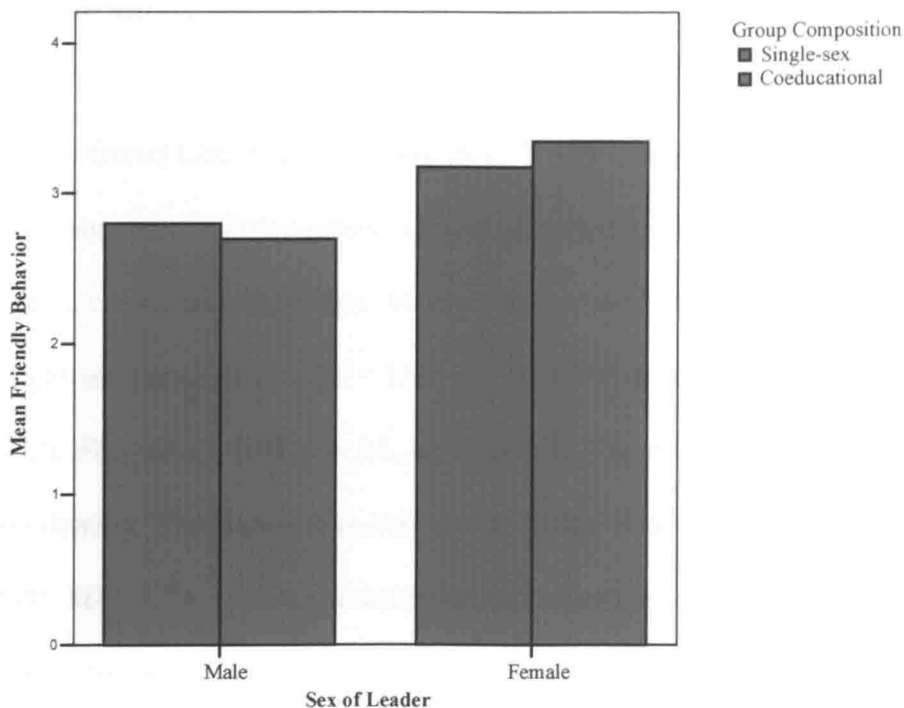


Figure 5: Self-Reported Friendly Behavior as a Function of Leader Sex and Group Composition

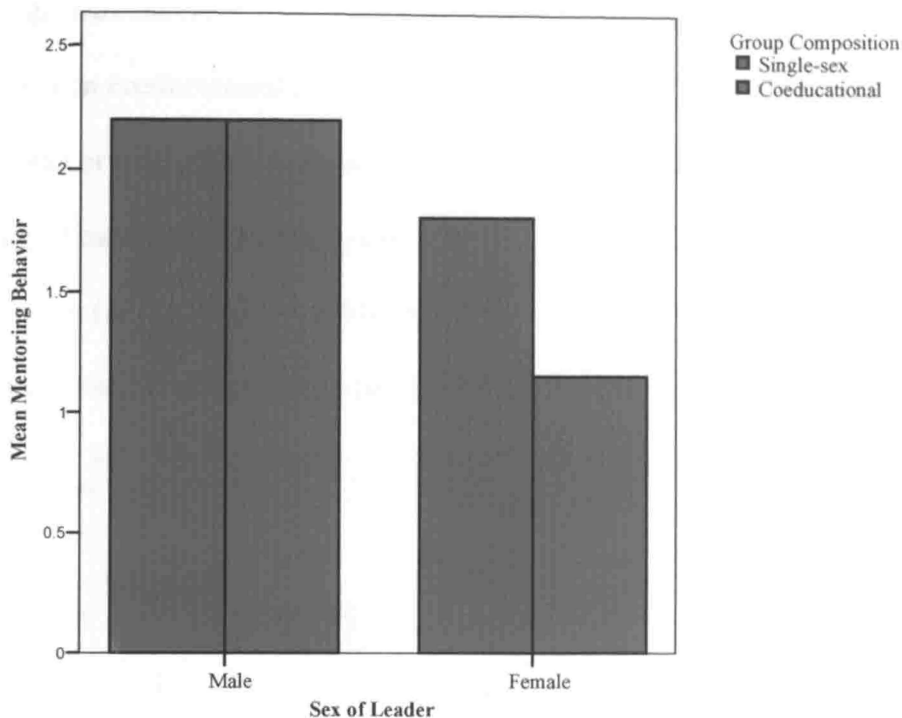


Figure 6: Self-Reported Mentoring Behavior as a Function of Leader Sex and Group Composition

Group Composition differences: ANOVA analyses showed group composition effects for five behaviors. All five behaviors were reported to a higher extent in single-sex organizations than in coeducational groups. Monitoring was reported as being used significantly more in single-sex organizations ( $M = 2.07$ ;  $SD = 1.48$ ) than in coeducational ones ( $M = 1.44$ ;  $SD = 1.73$ ),  $F(1, 106) = 3.98$ ,  $p = .05$ , see Figure 7. There was no sex effect or interaction for monitoring. Delegating was also used to a significantly higher extent in single-sex groups ( $M = 2.00$ ;  $SD = 1.74$ ) than in coeducational organizations ( $M = 1.15$ ;  $SD = 2.05$ ),  $F(1, 106) = 5.16$ ,  $p = .03$ . No sex effect or interaction was revealed, see Figure 8. In single-sex groups ( $M = 2.87$ ;  $SD = 1.07$ ) consulting was used more to a marginally significant degree than in coeducational ones ( $M = 2.28$ ;  $SD = 1.72$ ),  $F(1, 106) = 3.40$ ,  $p = .07$ . There was no sex effect or interaction of sex and group composition for consulting behavior, see Figure 9. Leaders in single-sex

organizations ( $M = 1.85$ ;  $SD = 1.34$ ) reported using upward influence to a greater extent than those in coeducational groups ( $M = 1.21$ ;  $SD = 1.49$ ),  $F(1, 106) = 5.27$ ,  $p = .02$ . Again, no sex effect or interactions were revealed, see Figure 10. The fifth behavior reported to be used significantly more in single-sex organizations ( $M = 1.97$ ;  $SD = 1.59$ ) than in coeducational groups ( $M = 1.00$ ;  $SD = 2.00$ ),  $F(1, 106) = 7.07$ ,  $p = .01$  was networking, see Figure 11. There was no effect of sex and no interaction between sex and group composition for networking.

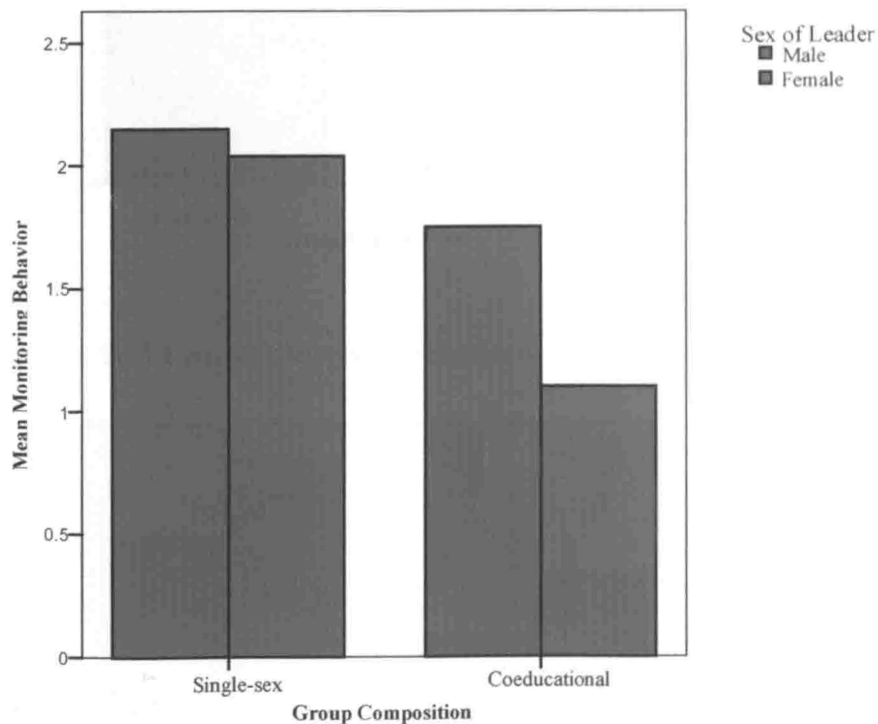


Figure 7: Self-Reported Monitoring Behavior as a Function of Leader Sex and Group Composition

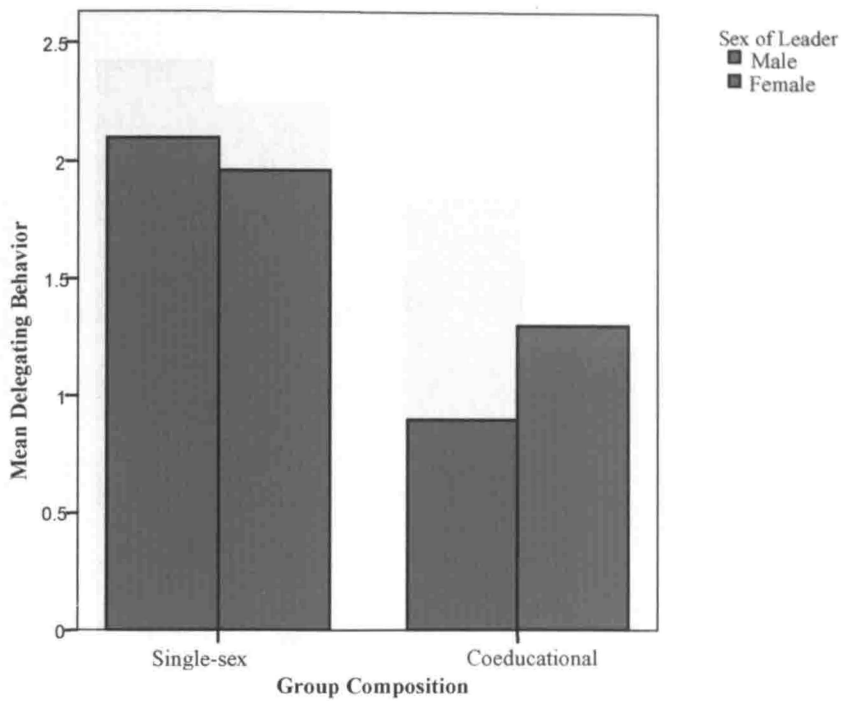


Figure 8: Self-Reported Delegating Behavior as a Function of Leader Sex and Group Composition

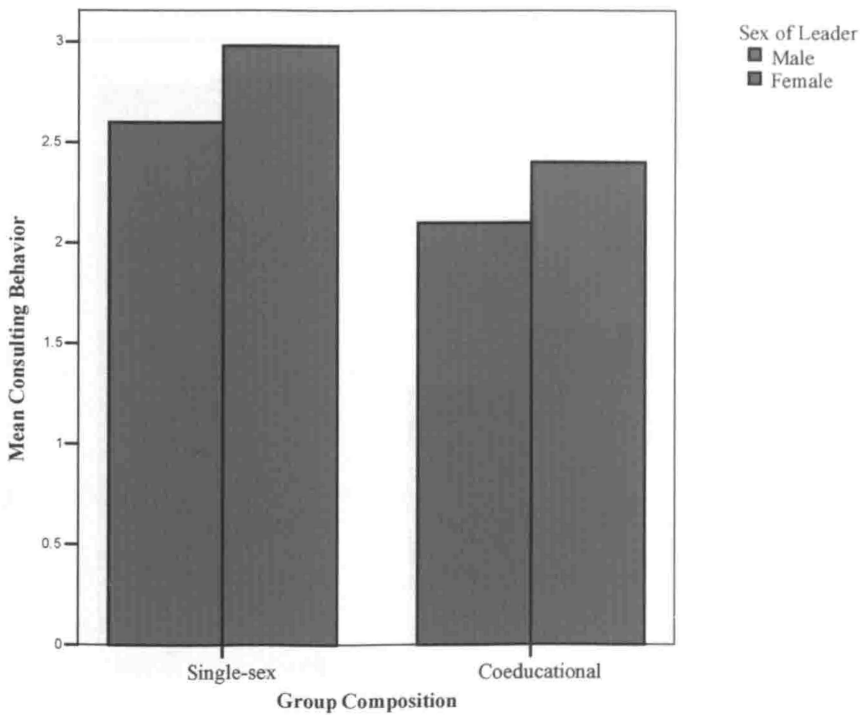


Figure 9: Self-Reported Consulting Behavior as a Function of Leader Sex and Group Composition

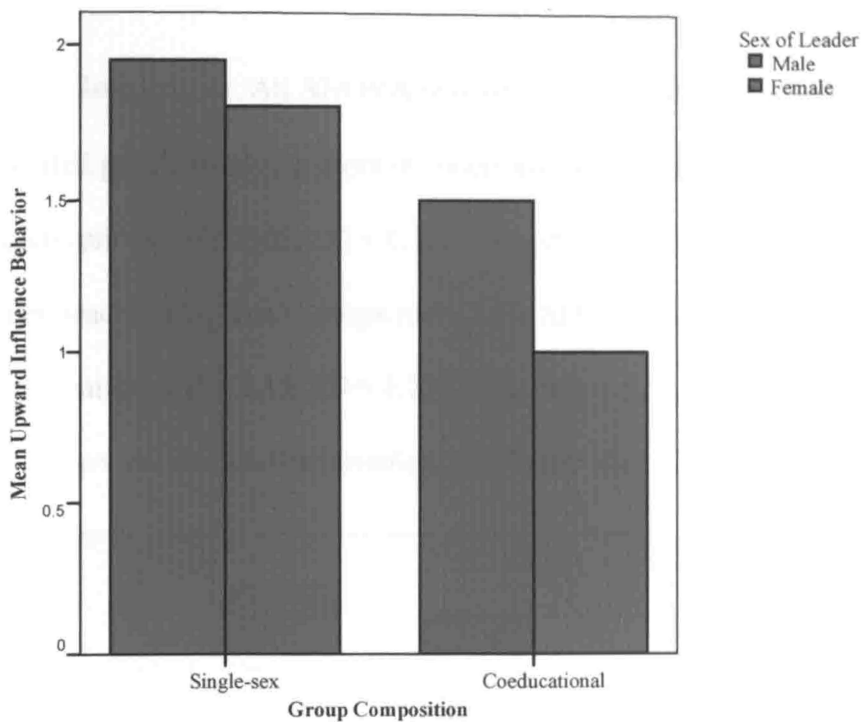


Figure 10: Self-Reported Upward Influence Behavior as a Function of Leader Sex and Group Composition

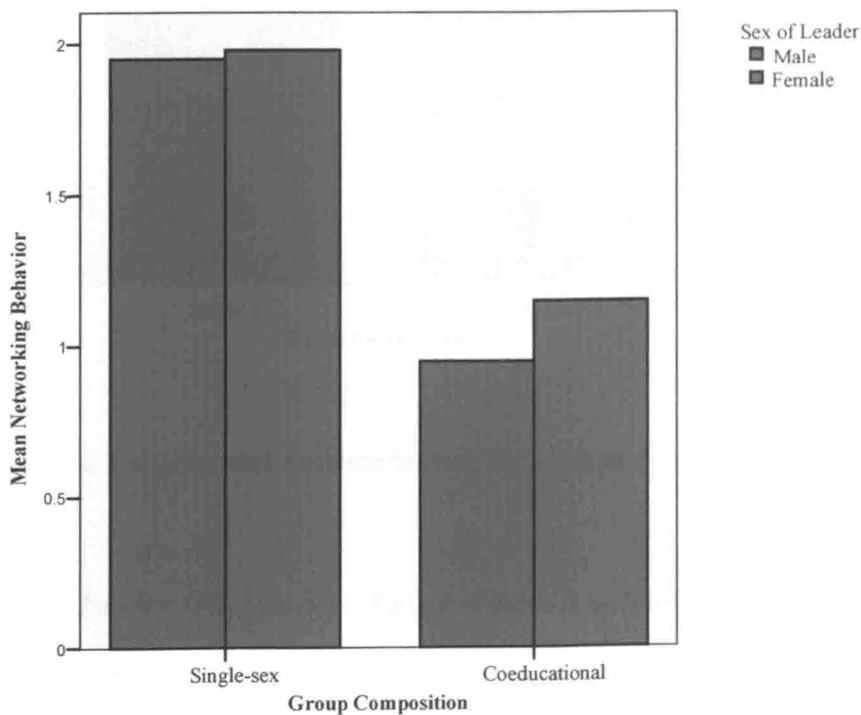


Figure 11: Self-Reported Networking Behavior as a Function of Leader Sex and Group Composition



Interactions: An ANOVA revealed a significant interaction for problem solving. Males reported problem solving more in coeducational groups ( $M = 2.84$ ;  $SD = 1.07$ ) than in single-sex organizations ( $M = 2.55$ ;  $SD = 1.19$ ). Women on the other hand reported problem solving more when leading single-sex groups ( $M = 2.90$ ;  $SD = .94$ ) than when leading coeducational organizations ( $M = 2.15$ ;  $SD = 1.23$ ),  $F(1, 106) = 5.57$ ,  $p = .02$ . However, no main effect of sex or group composition was revealed, see Figure 12.

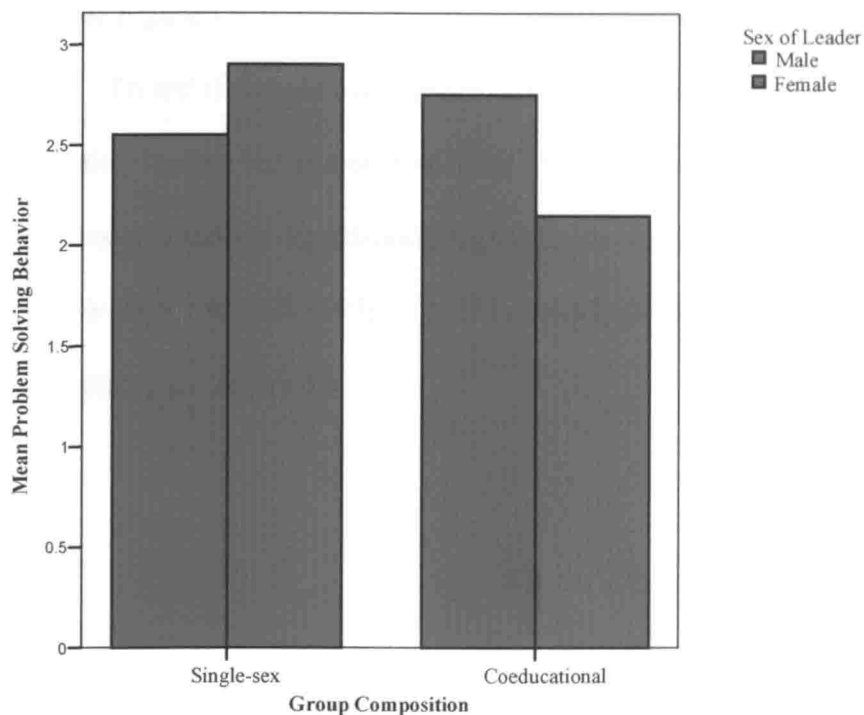


Figure 12: Self-Reported Problem Solving Behavior as a Function of Leader Sex and Group Composition

*Leader Self-Efficacy.* To test if there is a difference in leaders' self-reported self-efficacy, domain identification, or intent to lead in the future across sex or group composition, I conducted a multivariate ANOVA. A MANOVA was used because the three dependent variables, self-efficacy, domain identification, and intent to lead in the future are closely

correlated. For the leader's self-reported self-efficacy, the MANOVA revealed a marginally significant interaction,  $F(1, 108) = 3.52, p = .06$ . There was no main effect of sex or group composition revealed. I conducted a pairwise comparison, which revealed that men leading single-sex organizations reported higher levels of self-efficacy ( $M = 1.96; SE = .14$ ) than men leading coeducational groups ( $M = 1.64; SE = .14$ ),  $F(1, 108) = 2.38, p = .13$ . On the other hand, women leading coeducational organizations reported higher levels of self-efficacy ( $M = 1.89; SE = .14$ ) than their counterparts in single-sex groups ( $M = 1.71; SE = .09$ ),  $F(1, 108) = 1.17, p = .28$ , see Figure 13.

To test if there is a difference in self-reported self-efficacy across two independent variables, leaders versus non-leaders or sex, I conducted an ANOVA. The ANOVA revealed that leaders reported significantly higher levels of self-efficacy ( $M = 1.78; SD = .64$ ) than non-leaders ( $M = 1.43; SD = .92$ ),  $F(1, 152) = 6.53, p = .01$ . There was no main effect of sex and no interaction, see Figure 14.

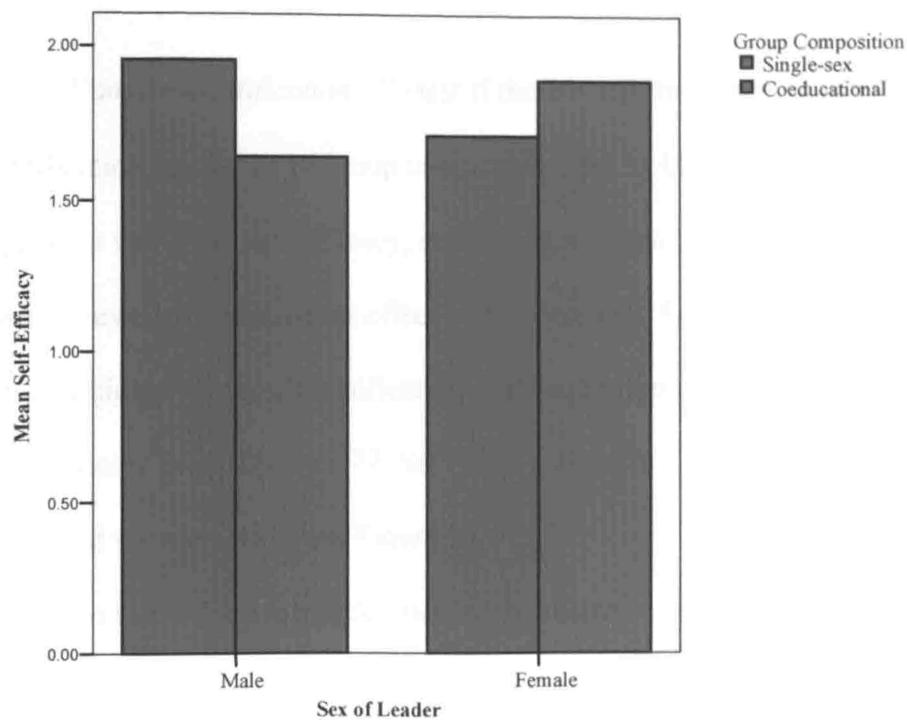


Figure 13: Leaders' Self-Reported Self-Efficacy as a Function of Leader Sex and Group Composition

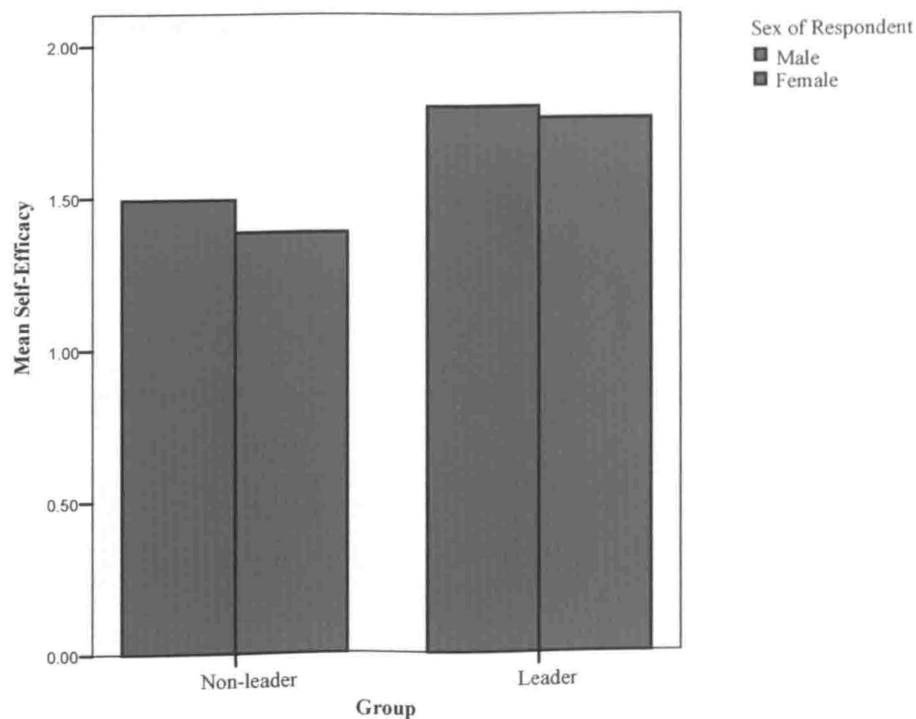


Figure 14: Self-Reported Self-Efficacy as a Function of Leadership Experience and Sex

*Domain Identification.* To test if there is a difference in leaders' self-reported domain identification across sex or group composition, the MANOVA I conducted with the three dependent variables, self-efficacy, domain identification, and intent to lead in the future was used. It revealed a significant effect of composition. Leaders of single-sex organizations reported higher levels of identification with leadership ( $M = 2.14$ ;  $SD = .58$ ) than leaders of coeducational groups ( $M = 1.77$ ;  $SD = 1.05$ ),  $F(1, 108) = 5.16$ ,  $p = .03$ . There was no main effect of sex and no interaction, see Figure 15.

To test if there is a difference in identification with the leadership domain across the dependent variables, leaders versus non-leaders or sex, I conducted an ANOVA. The ANOVA revealed that leaders reported significantly higher levels of identification with leadership ( $M = 2.01$ ;  $SD = .80$ ) than non-leaders ( $M = 1.58$ ;  $SD = 1.23$ ),  $F(1, 152) = 6.11$ ,  $p = .02$ . There was no main effect of sex and no interaction between sex and leader versus non-leader, see Figure 16.

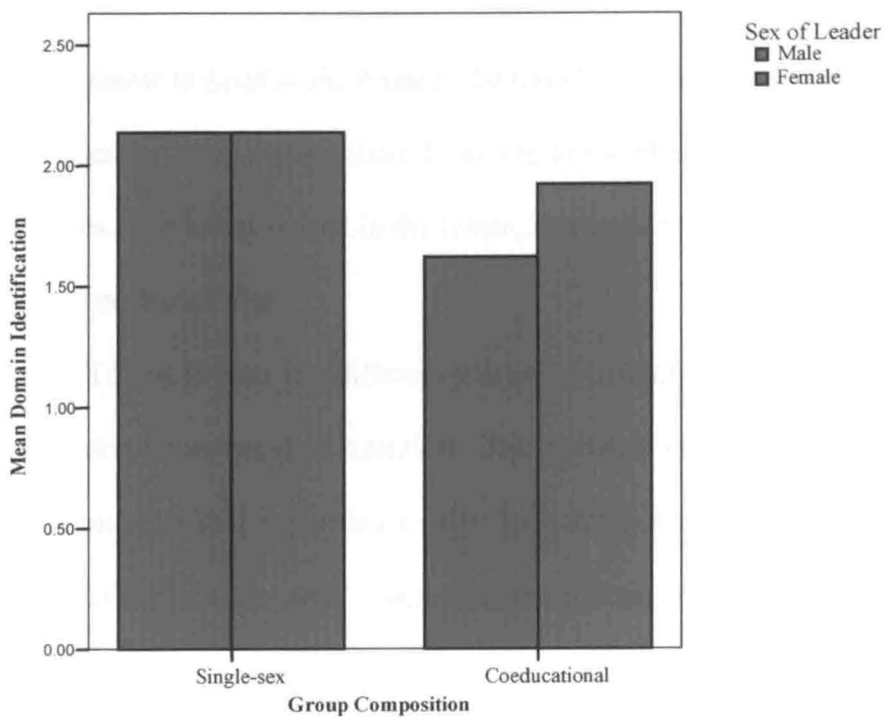


Figure 15: Leaders' Self-Reported Domain Identification as a Function of Leader Sex and Group Composition

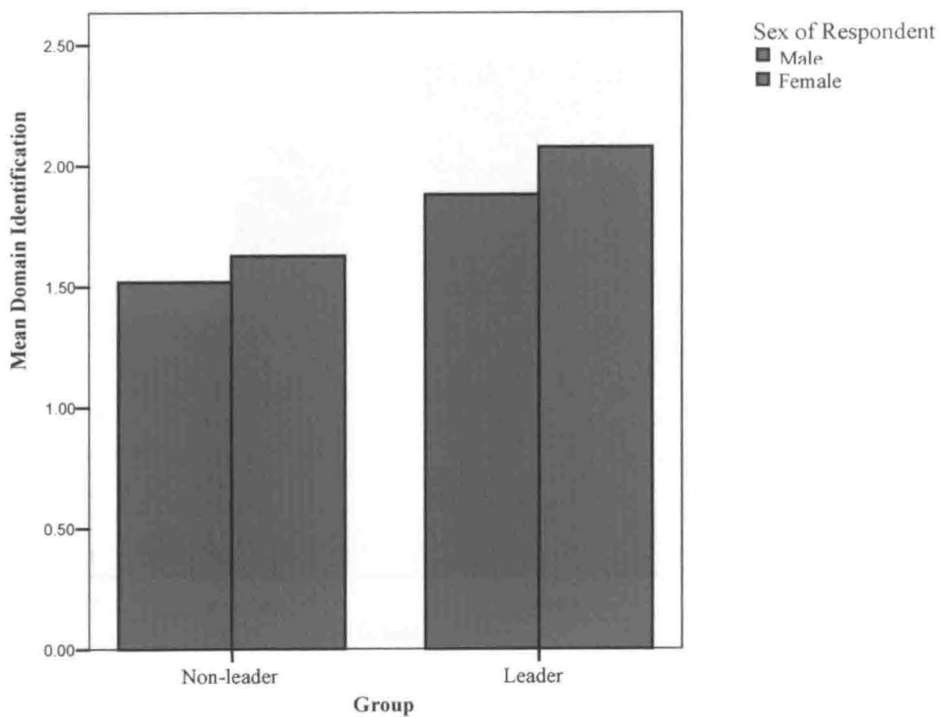


Figure 16: Self-Reported Domain Identification as a Function of Leadership Experience and Sex

*Intent to Lead in the Future.* To test if there is a difference in intent to lead in the future across sex or group composition, I referred to the MANOVA conducted with the three dependent variables. For intent to lead in the future, it revealed no main effects of sex or composition and showed no interaction.

To test if there is a difference in intent to lead in the future across sex or leader versus non-leader, I conducted an ANOVA. The ANOVA revealed that leaders reported a significantly higher intent to lead in the future ( $M = 2.27$ ;  $SD = .80$ ) than non-leaders ( $M = 1.49$ ;  $SD = 1.60$ ),  $F(1, 152) = 17.13$ ,  $p < .001$ . There was also a main effect for sex,  $F(1, 152) = 5.12$ ,  $p = .03$ . Females reported a greater intent to lead in the future ( $M = 2.19$ ;  $SD = 1.05$ ) than males ( $M = 1.81$ ;  $SD = 1.25$ ). There was no interaction revealed, see Figure 16.

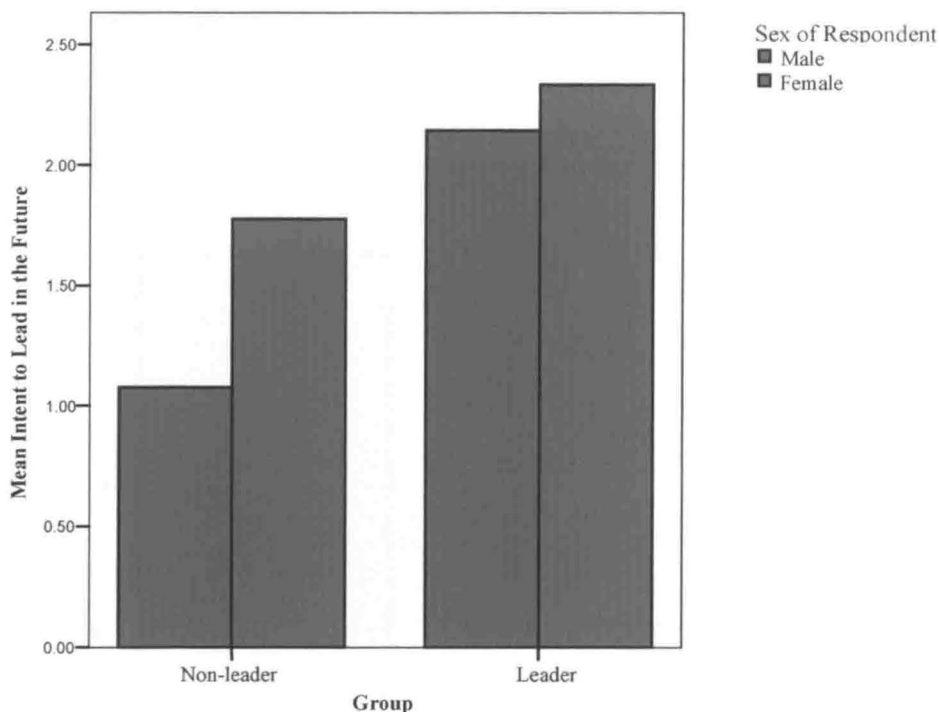


Figure 16: Self-Reported Intent to Lead in the Future as a Function of Leadership Experience and Sex

## Study 2

In this vignette study, three independent variables were manipulated. The leader's sex, the group composition of the group being lead, and the leadership style used were manipulated. The vignettes were used to gather data on how these three independent variables affect the perception of the leader.

*Across Conditions.* A one-way ANOVA with one independent variable, leader's sex, revealed that overall, the female leaders were evaluated more positively than the male leaders. The women were rated as less disagreeable ( $M = .21$ ;  $SD = 1.57$ ) than the men ( $M = .89$ ;  $SD = 1.38$ ),  $F(1, 110) = 5.89$ ,  $p = .02$ , see Figure 17. The women were also rated as significantly more likeable ( $M = -.48$ ;  $SD = 1.54$ ) than the men ( $M = -1.11$ ;  $SD = 1.19$ ),  $F(1, 110) = 5.80$ ,  $p = .02$ , see Figure 18. Respondents viewed the female leaders as significantly warmer ( $M = -.77$ ;  $SD = 1.60$ ) than the male leaders as well ( $M = -1.34$ ;  $SD = 1.37$ ),  $F(1, 110) = 4.15$ ,  $p = .04$ , see Figure 19.

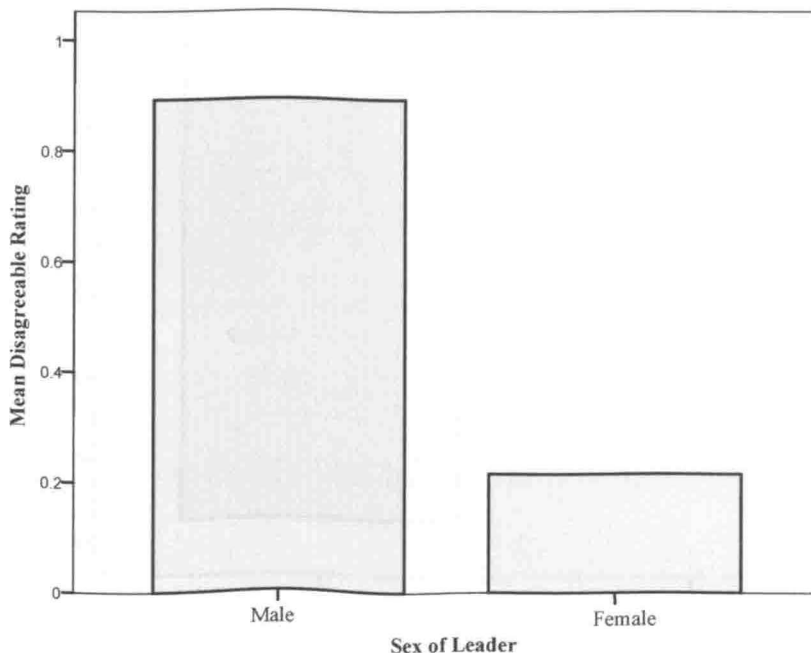


Figure 17: Disagreeable Rating as a Function of Leader's Sex

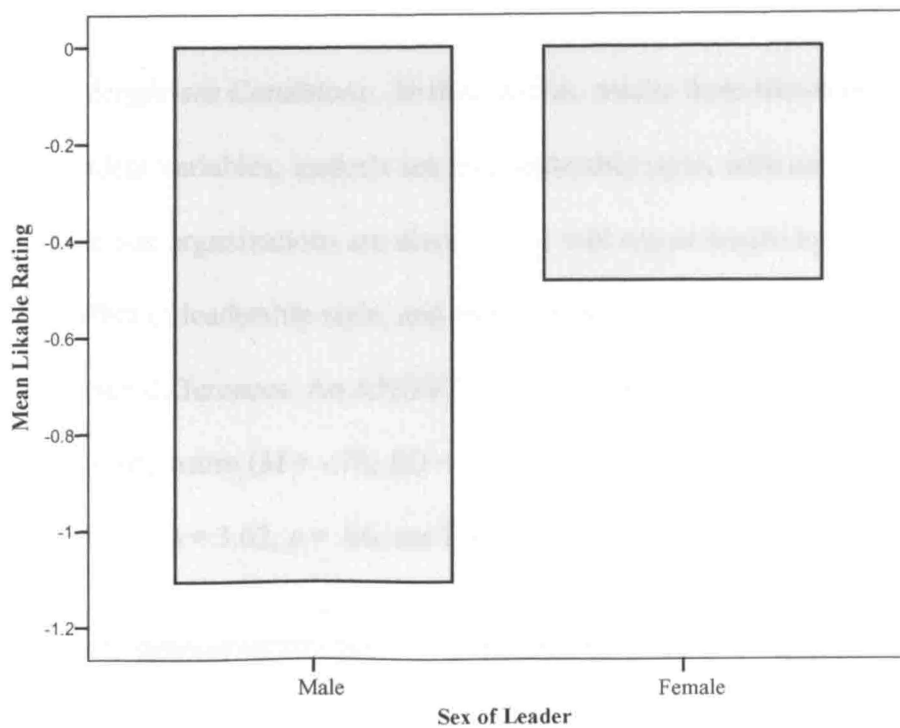


Figure 18: Likable Rating as a Function of Leader's Sex

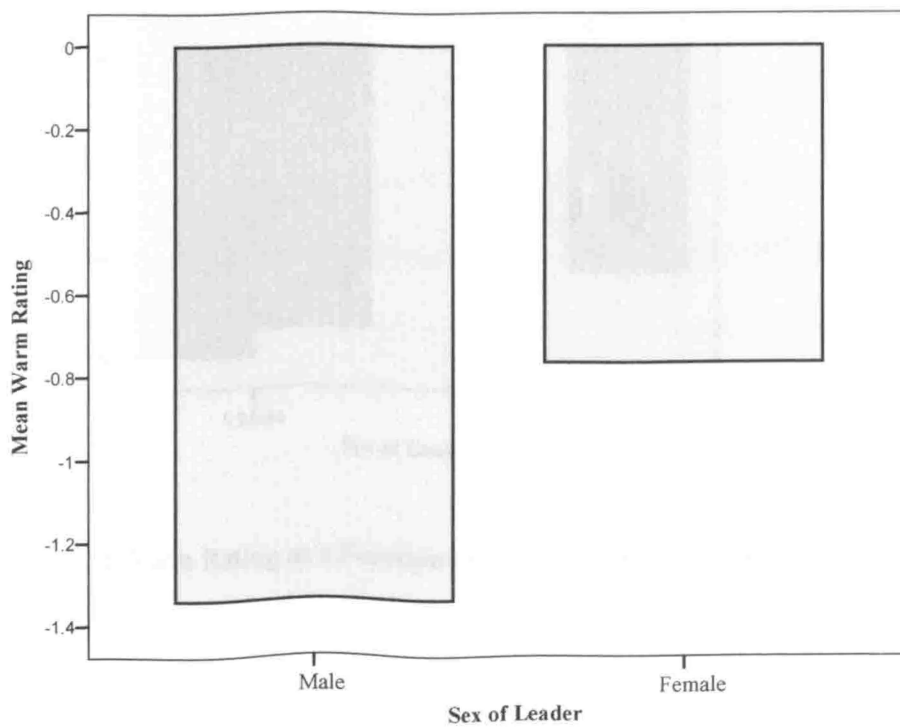


Figure 19: Warm Rating as a Function of Leader's Sex



*Single-sex Conditions.* In this section, results from two-way ANOVAs with two independent variables, leader's sex and leadership style, with only the vignettes depicting leaders of single-sex organizations are discussed. I will report results by main effect of leader's sex, main effect of leadership style, and then interaction effects.

**Sex differences:** An ANOVA revealed that women leading single-sex organizations were seen as more warm ( $M = -.70$ ;  $SD = 1.79$ ) than men leading single-sex groups ( $M = -1.46$ ;  $SD = 1.29$ ),  $F(1, 51) = 3.62$ ,  $p = .06$ , see Figure 20.

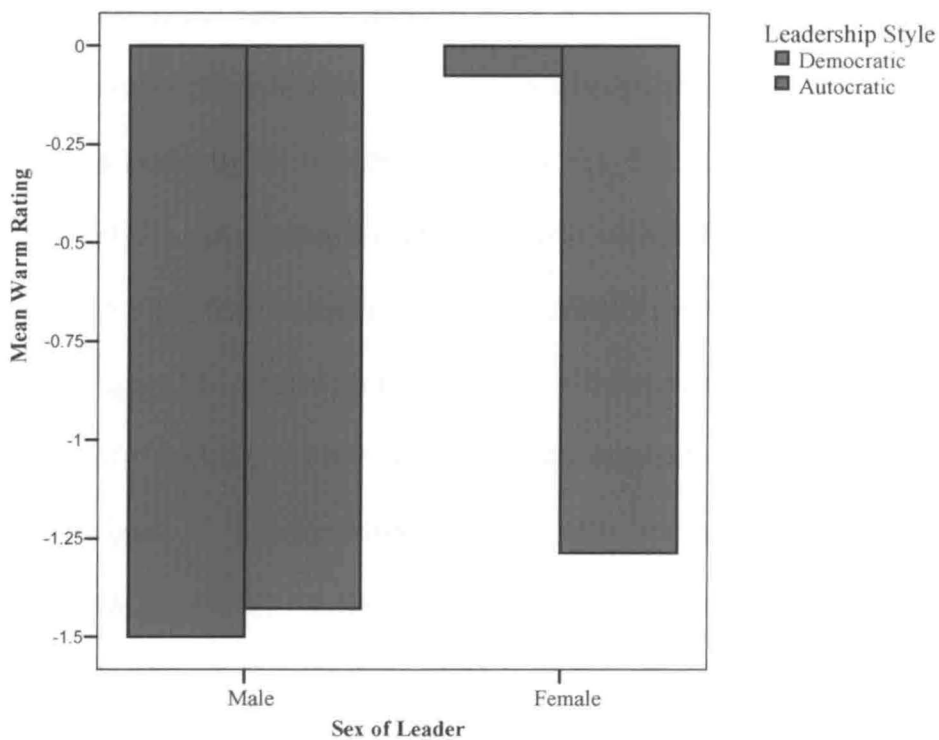


Figure 20: Warm Rating as a Function of Sex of Leader and Leadership Style

**Leadership Style Differences:** ANOVAs also showed significant effects of leadership style used by the leader. Respondents were significantly more likely to want to be a member of

the single-sex group when the leader was using a democratic style ( $M = -1.04$ ;  $SD = 1.65$ ) than when the leader was acting in an autocratic manner ( $M = -1.86$ ;  $SD = 1.30$ ),  $F(1, 51) = 4.37$ ,  $p = .04$ , see Figure 21. Respondents reported that they would be significantly more comfortable approaching a leader acting democratically ( $M = .30$ ;  $SD = 1.66$ ) than one acting autocratically ( $M = -.68$ ;  $SD = 1.77$ ),  $F(1, 51) = 4.28$ ,  $p = .04$ , see Figure 22. Similarly, respondents reported that they would be more uneasy about approaching a leader acting autocratically ( $M = 1.11$ ;  $SD = 1.66$ ) than a leader acting democratically ( $M = -.37$ ;  $SD = .36$ ),  $F(1, 51) = 13.04$ ,  $p = .001$ , see Figure 23. Leaders acting autocratically were viewed as more disagreeable ( $M = 1.04$ ;  $SD = .71$ ) than leaders acting democratically ( $M = .19$ ;  $SD = 1.52$ ),  $F(1, 51) = 3.90$ ,  $p = .05$  and the leaders using a democratic style were rated as more likeable ( $M = -.44$ ;  $SD = 1.34$ ) than the leaders acting autocratically ( $M = -1.29$ ;  $SD = 1.49$ ),  $F(1, 51) = 5.21$ ,  $p = .03$ , see Figures 24 and 25 respectively. Leaders using an autocratic style were seen as marginally more independent ( $M = 1.64$ ;  $SD = 1.65$ ) than leaders acting democratically ( $M = 1.23$ ;  $SD = 1.54$ ),  $F(1, 51) = 3.52$ ,  $p = .07$ , see Figure 26. Respondents also reported being marginally more dissatisfied with autocratic leaders ( $M = 1.43$ ;  $SD = 1.60$ ) than democratic ones ( $M = .67$ ;  $SD = 1.59$ ),  $F(1, 51) = 3.15$ ,  $p = .08$ , see Figure 27. Leaders acting democratically in single-sex groups were rated as better listeners ( $M = -.44$ ;  $SD = 1.50$ ) than leaders using an autocratic style in single-sex organizations ( $M = -1.64$ ;  $SD = 1.42$ ),  $F(1, 51) = 8.98$ ,  $p = .004$ , see Figure 28.

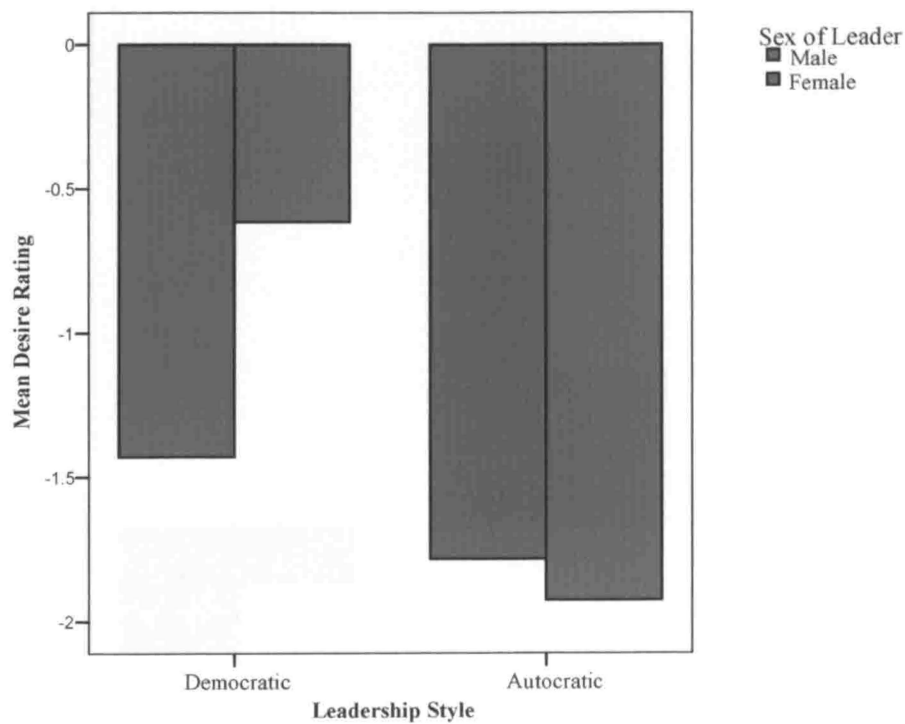


Figure 21: Desire to be a Member as a Function of Leadership Style and Leader Sex

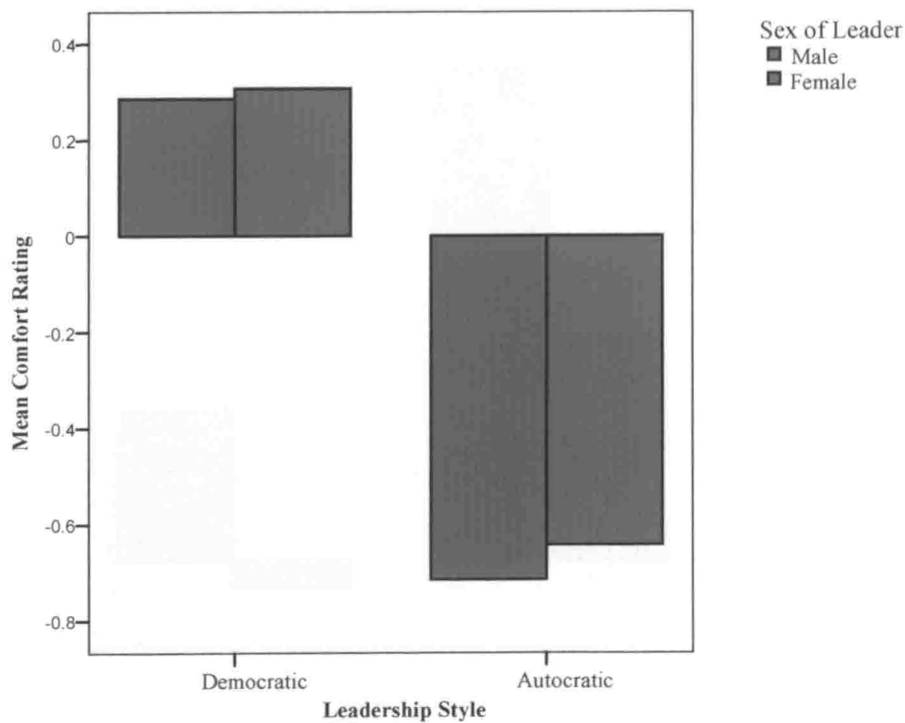


Figure 22: Comfort Approaching Leader as a Function of Leadership Style and Leader Sex

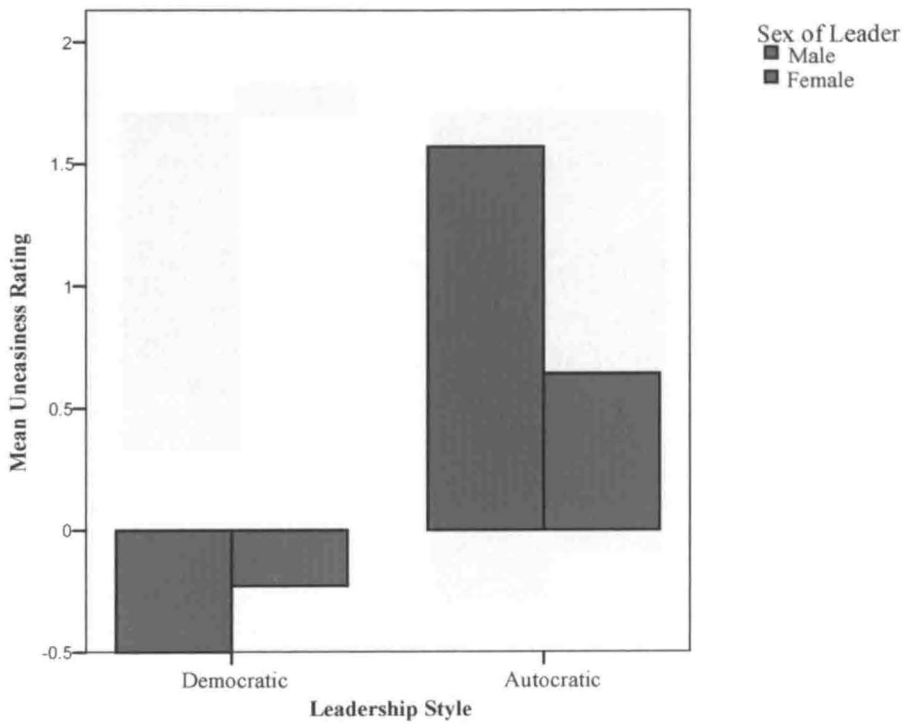


Figure 23: Uneasiness Approaching Leader as a Function of Leadership Style and Leader Sex

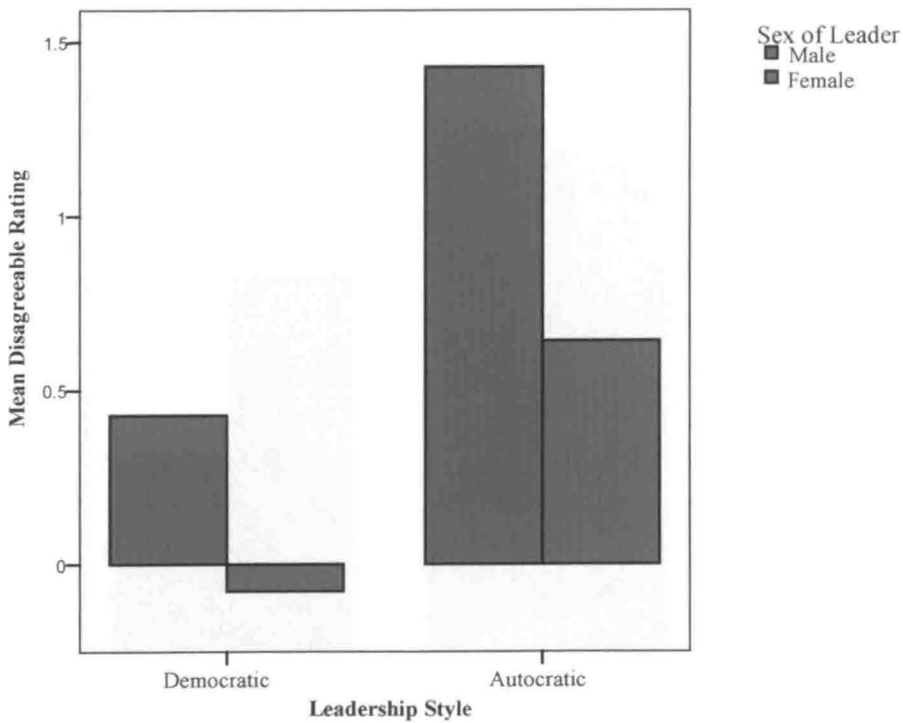


Figure 24: Disagreeable Rating as a Function of Leadership Style and Leader Sex

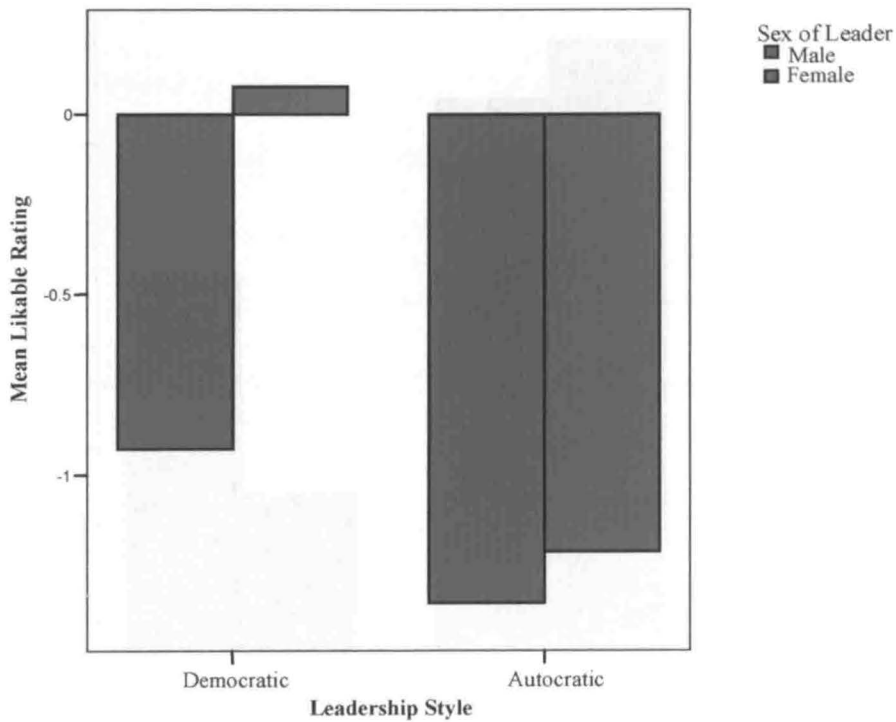


Figure 25: Likable Rating as a Function of Leadership Style and Leader Sex

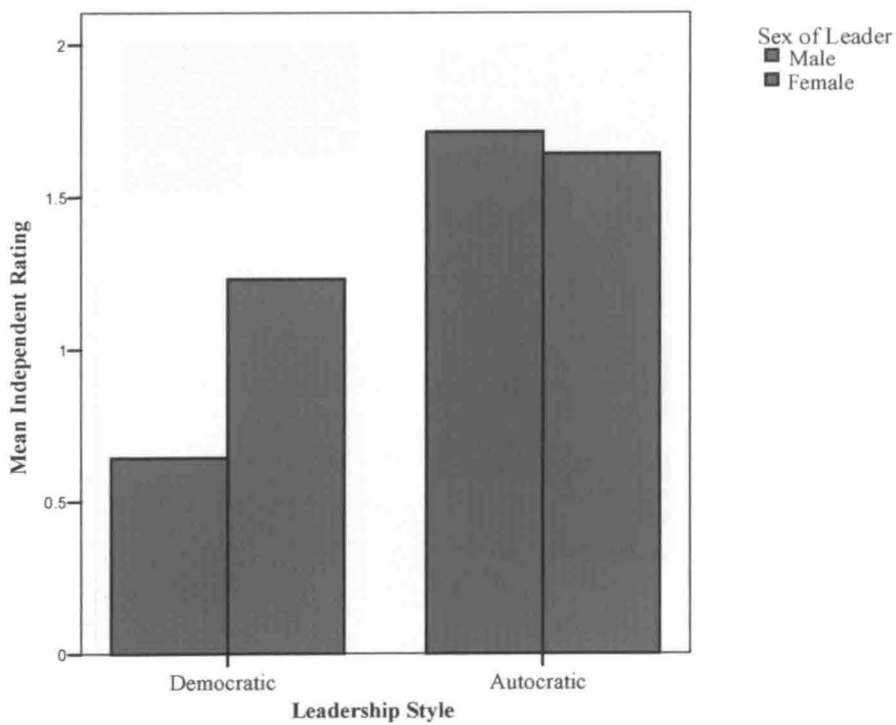


Figure 26: Independent Rating as a Function of Leadership Style and Leader Sex

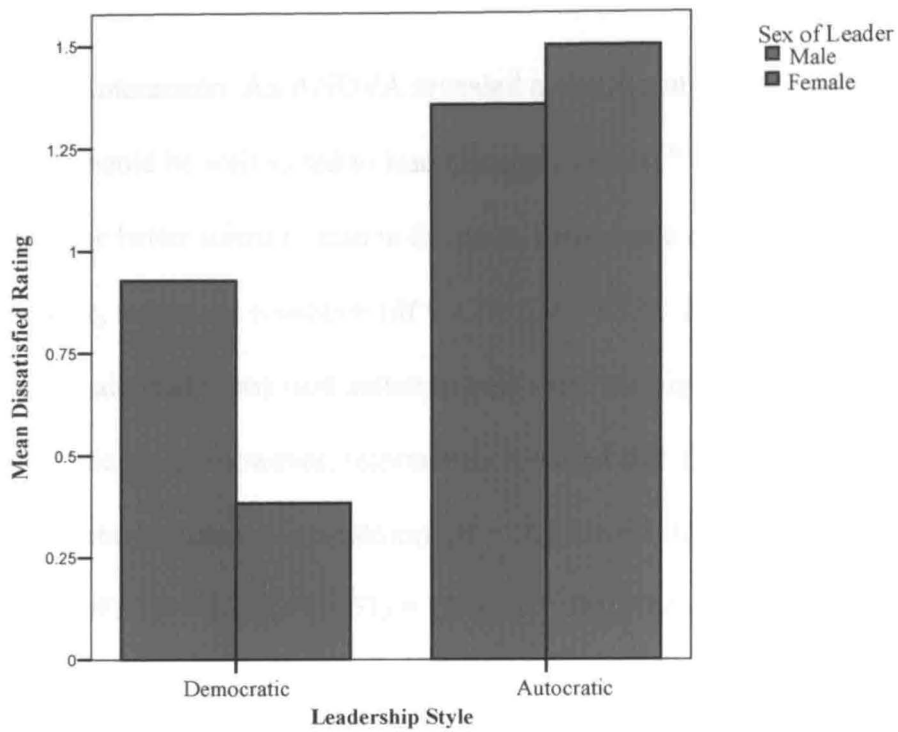


Figure 27: Dissatisfied Rating as a Function of Leadership Style and Leader Sex

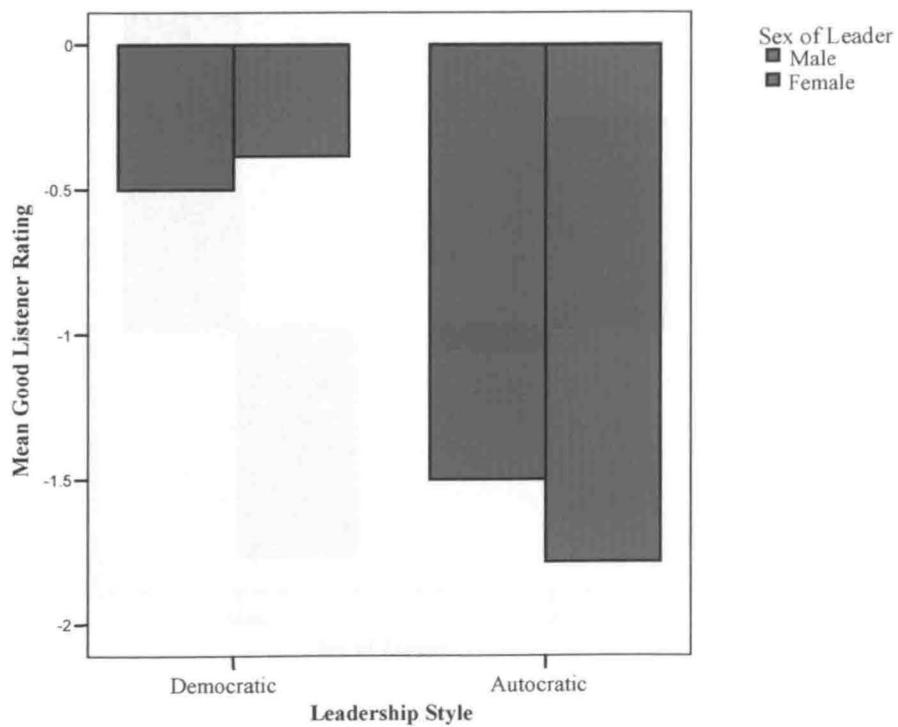


Figure 28: Good Listener Rating as a Function of Leadership Style and Leader Sex

Interaction: An ANOVA revealed a significant interaction for the statement, “A male leader would be well suited to lead this organization.” Respondents reported that a male leader would be better suited to lead in the male, democratic condition ( $M = 1.07$ ;  $SD = 1.27$ ) than in the male, autocratic condition ( $M = -.79$ ;  $SD = 1.13$ ). In other words, respondents did not believe that a male leader was well suited to lead when the vignette displayed a male leading in an autocratic style. However, respondents reported that a male leader would be better suited to lead in the female, autocratic condition ( $M = .71$ ;  $SD = 1.07$ ) than in the female, democratic condition ( $M = -.08$ ;  $SD = 2.10$ ),  $F(1, 51) = 11.69$ ,  $p = .001$ . Respondents believed that a male leader would be better suited to lead instead of the female leader when she was using an autocratic style, see Figure 29.

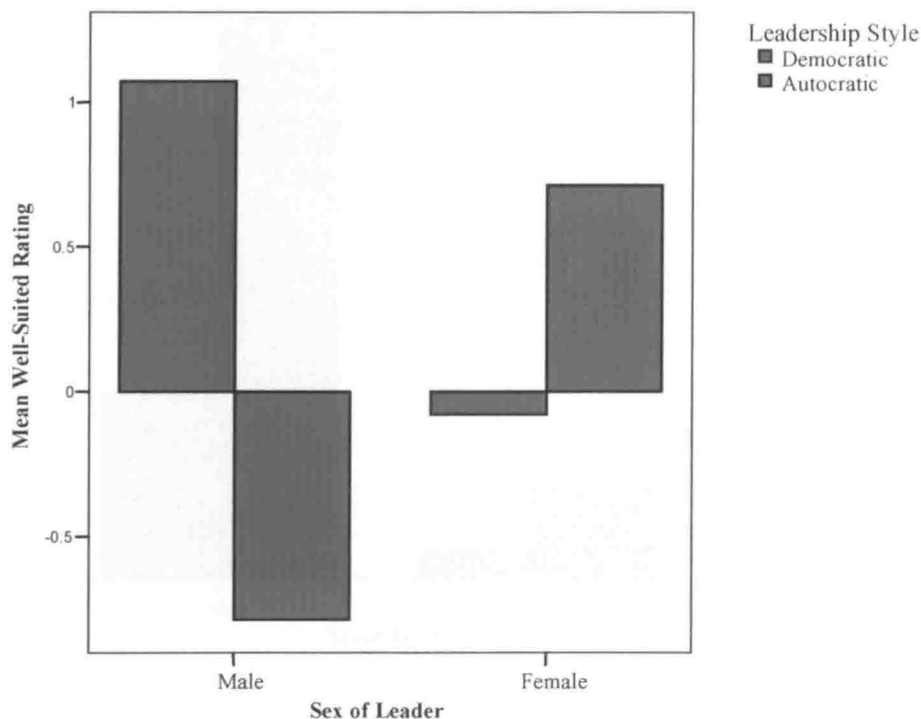


Figure 29: Male Leader Well-Suited to Lead Rating as a Function of Leader Sex and Leadership Style

*Coeducational Conditions.* Results from two-way ANOVAs with two independent variables, leader's sex and leadership style are discussed in this section. The analyses were done with data from only the vignettes depicting leaders of coeducational organizations. Again, I will report results by main effect of leader's sex, main effect of leadership style, and then interaction effects.

**Sex differences:** An ANOVA revealed that the male leaders of coeducational groups were rated as more disagreeable ( $M = .69$ ;  $SD = 1.27$ ) than the female leaders of coeducational organizations ( $M = .14$ ;  $SD = 1.38$ ),  $F(1, 53) = 4.23$ ,  $p = .05$ , see Figure 30. Women were also viewed as more likeable ( $M = -.38$ ;  $SD = 1.37$ ) than the men ( $M = -1.07$ ;  $SD = 1.25$ ),  $F(1, 53) = 4.05$ ,  $p = .05$ , see Figure 31.

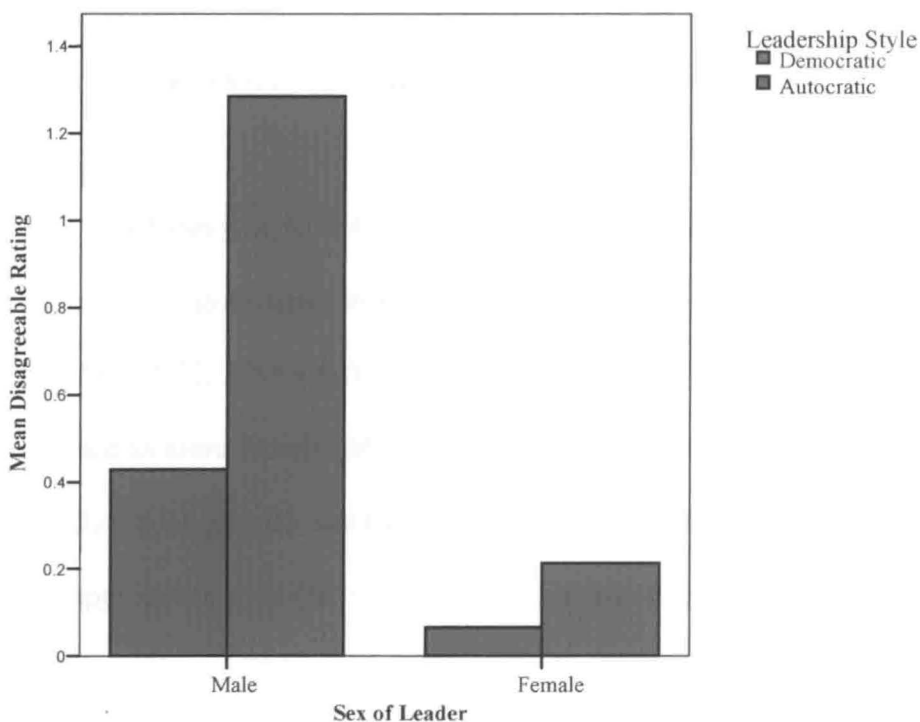


Figure 30: Disagreeable Rating as a Function of Leader Sex and Leadership Style



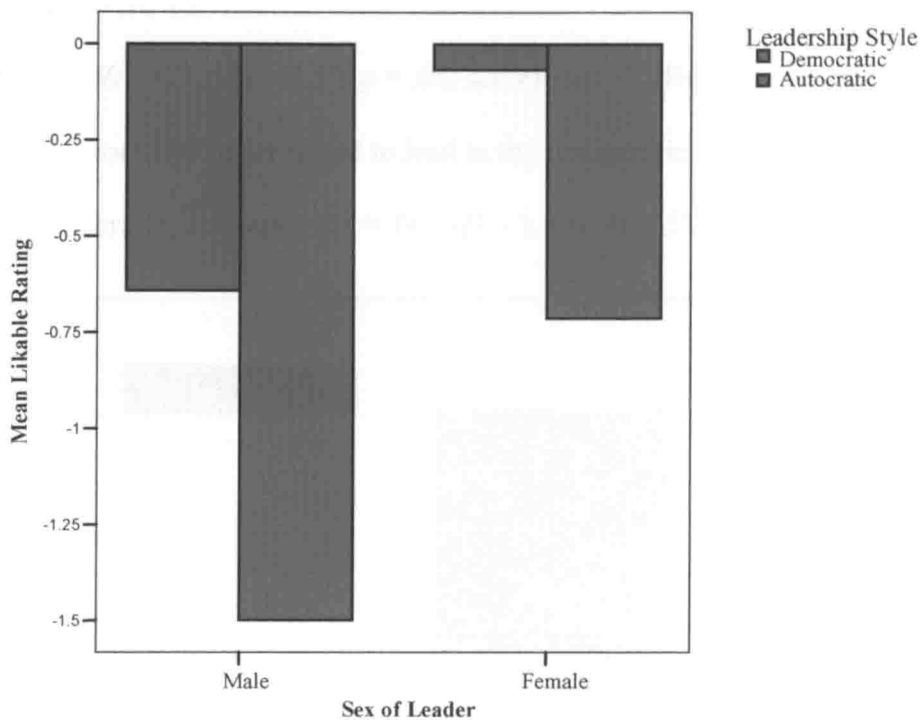


Figure 31: Likable Rating as a Function of Leader Sex and Leadership Style

Leadership Style Differences: An ANOVA revealed that leaders using a democratic style were rated as significantly more effective ( $M = .14$ ;  $SD = 1.73$ ) than those using an autocratic style ( $M = -1.32$ ;  $SD = 1.63$ ),  $F(1, 53) = 10.36$ ,  $p = .002$ , see Figure 32. Democratic leaders were also rated as more likable ( $M = -.34$ ;  $SD = 1.08$ ) than autocratic leaders ( $M = -1.11$ ;  $SD = 1.50$ ),  $F(1, 53) = 4.94$ ,  $p = .03$ , see Figure 33. The leaders acting democratically were seen as having a more appropriate style ( $M = -.31$ ;  $SD = 1.42$ ) than those acting autocratically ( $M = -1.18$ ;  $SD = 1.63$ ),  $F(1, 53) = 4.70$ ,  $p = .03$ , see Figure 34. Respondents reported that they would be significantly more dissatisfied with the autocratic leaders ( $M = .93$ ;  $SD = 1.74$ ) than with the democratic ones ( $M = .14$ ;  $SD = 1.19$ ),  $F(1, 53) = 3.98$ ,  $p = .05$ , see Figure 35. Leaders acting democratically were seen as being marginally more competent ( $M = .45$ ;  $SD = 1.40$ ) than those acting autocratically ( $M = -.21$ ;  $SD = 1.45$ ),  $F(1, 53) = 2.98$ ,  $p = .09$ , see Figure 36. Democratic

leaders were also rated as better listeners ( $M = -.34$ ;  $SD = .94$ ) than autocratic ones ( $M = -1.04$ ;  $SD = 1.69$ ),  $F(1, 53) = 3.57$ ,  $p = .06$ , see Figure 37. Respondents also reported that a female leader would be better suited to lead in the democratic conditions ( $M = .79$ ;  $SD = 1.37$ ) than in the autocratic conditions ( $M = .00$ ;  $SD = 1.49$ ),  $F(1, 53) = 4.38$ ,  $p = .04$ , see Figure 38.

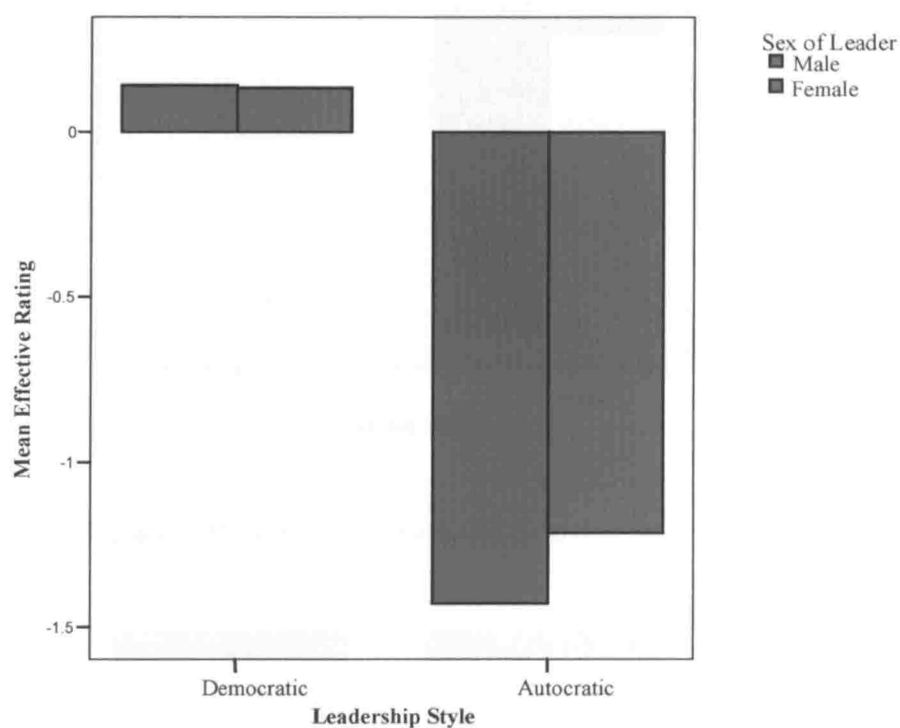


Figure 32: Effective Rating as a Function of Leadership Style and Leader Sex

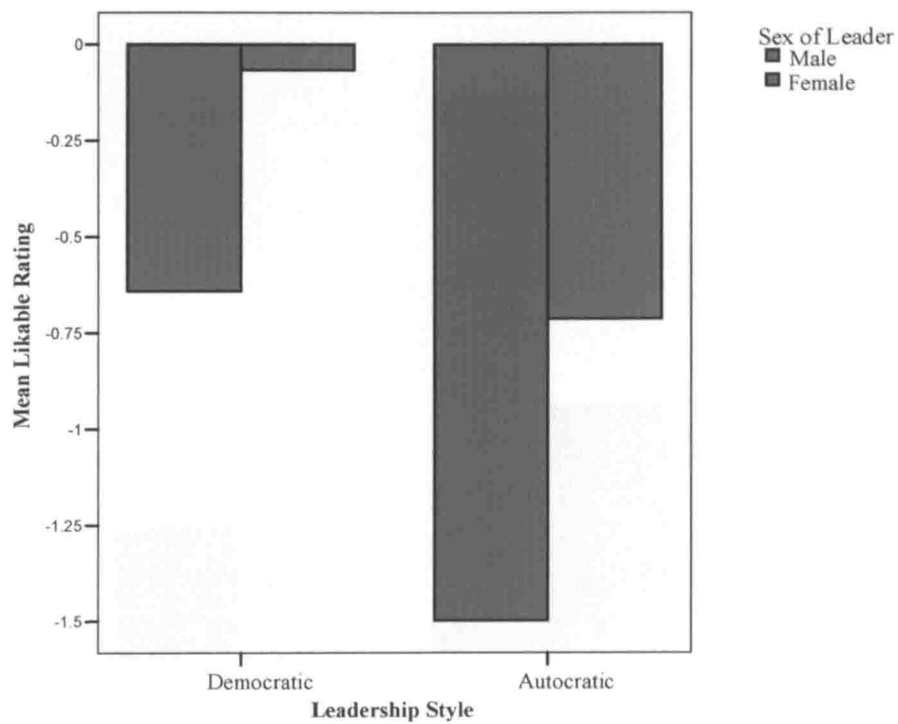


Figure 33: Likable Rating as a Function of Leadership Style and Leader Sex

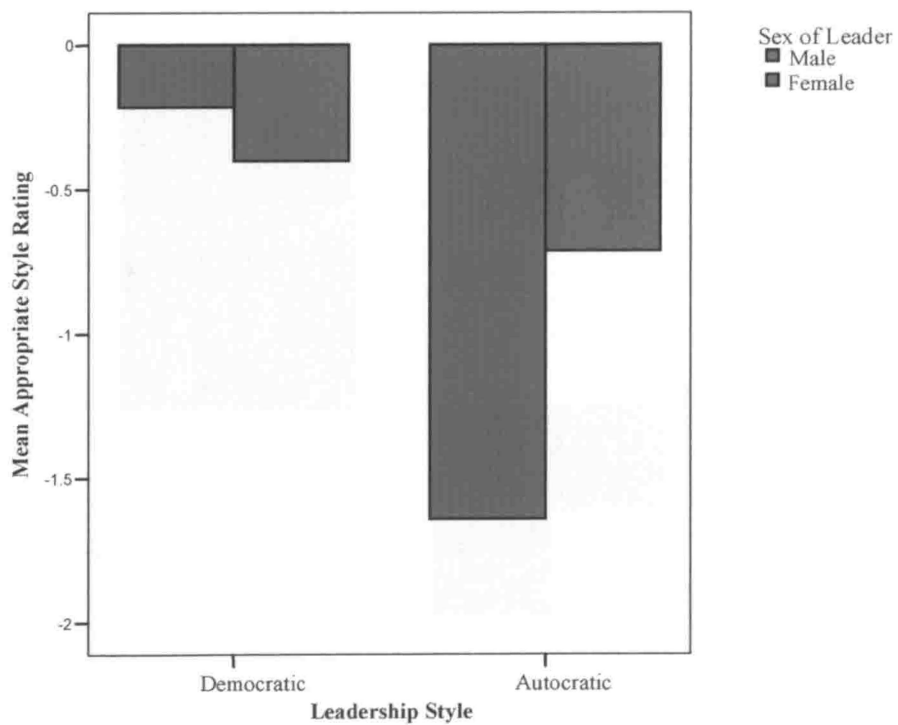


Figure 34: Appropriate Style Rating as a Function of Leadership Style and Leader Sex

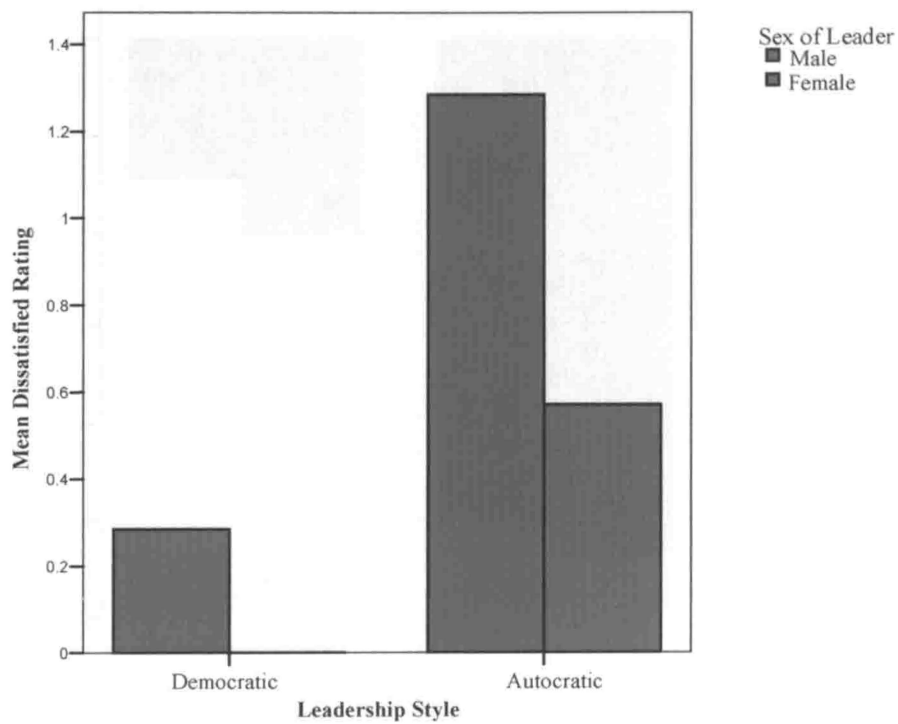


Figure 35: Dissatisfied Rating as a Function of Leadership Style and Leader Sex

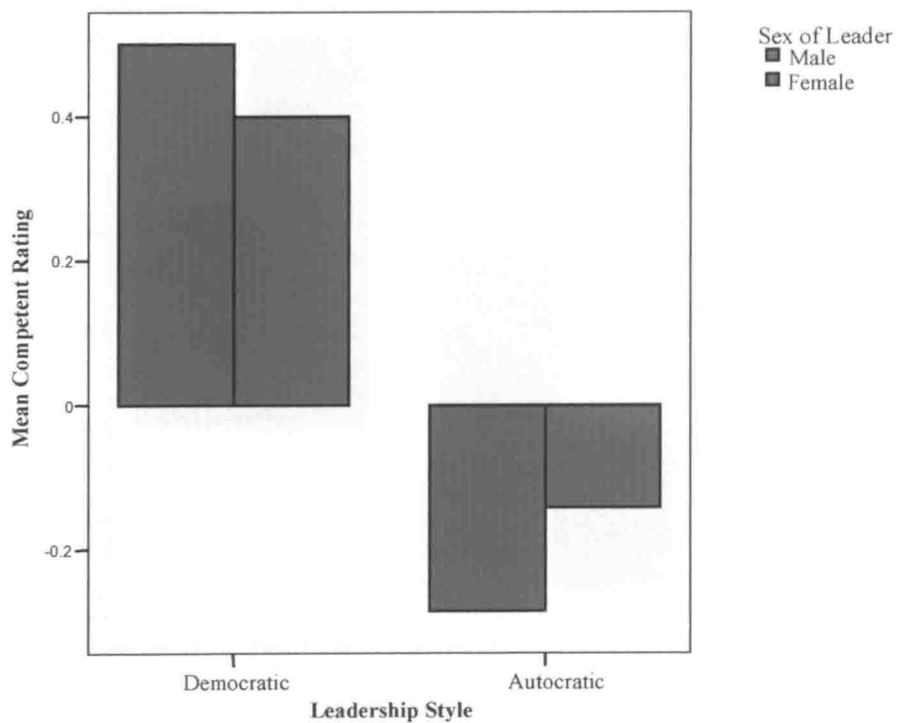


Figure 36: Competent Rating as a Function of Leadership Style and Leader Sex

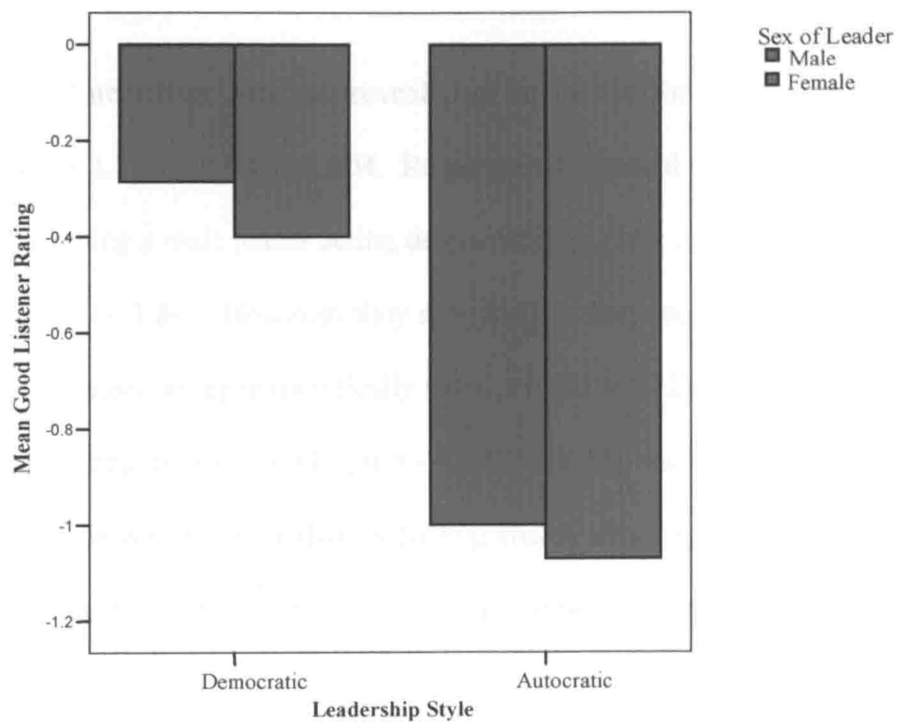


Figure 37: Good Listener Rating as a Function of Leadership Style and Leader Sex

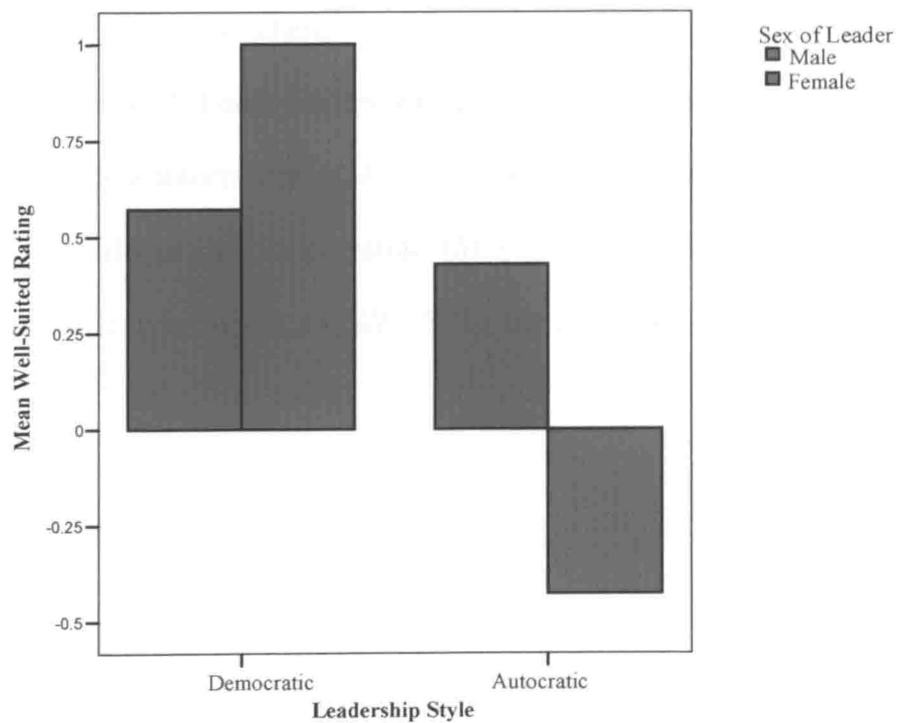


Figure 38: Female Well-Suited to Lead Rating as a Function of Leadership Style and Leader Sex

Interaction: Analyses revealed an interaction for feeling comfortable approaching the leader  $F(1, 53) = 9.09, p = .004$ . Respondents reported that they would feel more comfortable approaching a male leader acting democratically ( $M = .64; SD = 1.82$ ) than autocratically ( $M = -1.29; SD = 1.86$ ). However, they reported that they would be more comfortable approaching a female leader acting autocratically ( $M = .21; SD = 1.72$ ) than they would approaching a female leader acting democratically ( $M = -.67; SD = 1.63$ ), see Figure 39. A marginally significant interaction was also revealed for feeling uneasy about approaching the leaders  $F(1, 53) = 3.74, p = .06$ . Respondents reported that they would be more uneasy approaching male leaders acting autocratically ( $M = .57; SD = 1.65$ ) than male leaders acting democratically ( $M = -.29; SD = 1.86$ ). On the other hand, they reported feeling more uneasy approaching female leaders acting democratically ( $M = .80; SD = 1.27$ ) than female leaders acting autocratically ( $M = .00; SD = 1.66$ ), see Figure 40. There was a similar trend for ratings of warmth  $F(1, 53) = 2.54, p = .12$ . Respondents rated male leaders acting democratically as warmer ( $M = -.93; SD = 1.44$ ) than those leading autocratically ( $M = -1.50; SD = 1.45$ ). However, they viewed female leaders acting autocratically as marginally warmer ( $M = -.50; SD = 1.51$ ) than the female leaders using a democratic style ( $M = -1.13; SD = 1.30$ ), see Figure 41.

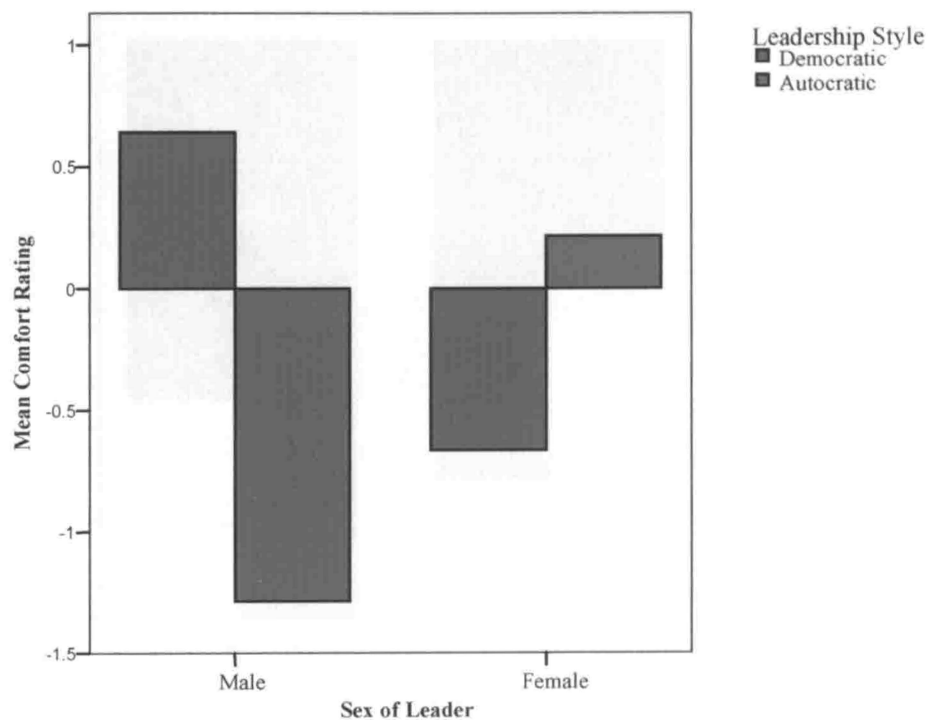


Figure 39: Comfort Approaching Leader as a Function of Leader Sex and Leadership Style Used

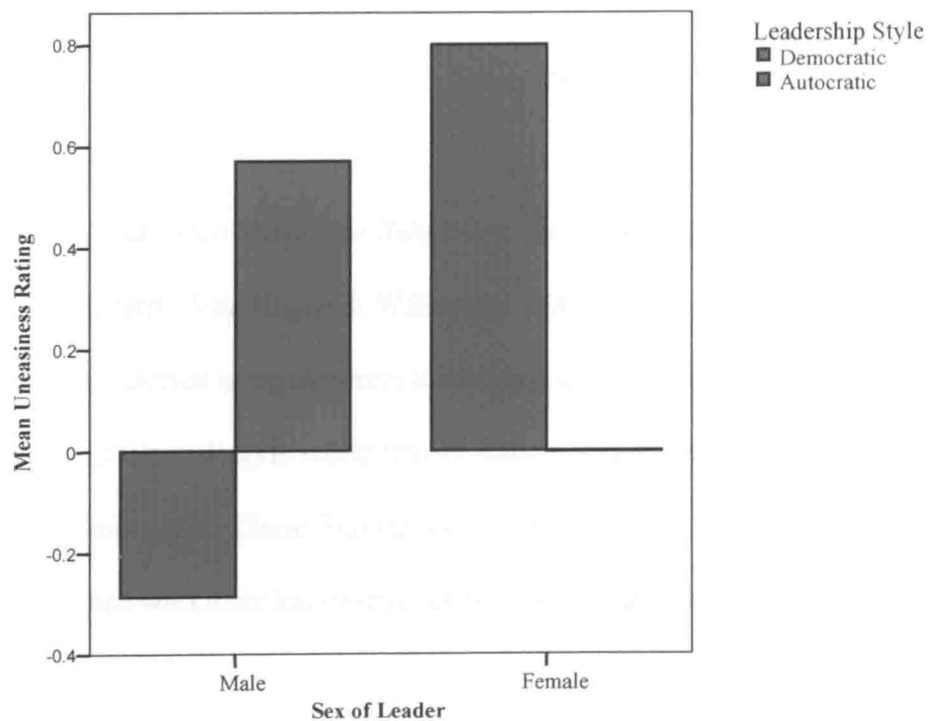


Figure 40: Uneasiness Approaching Leader as a Function of Leader Sex and Leadership Style Used

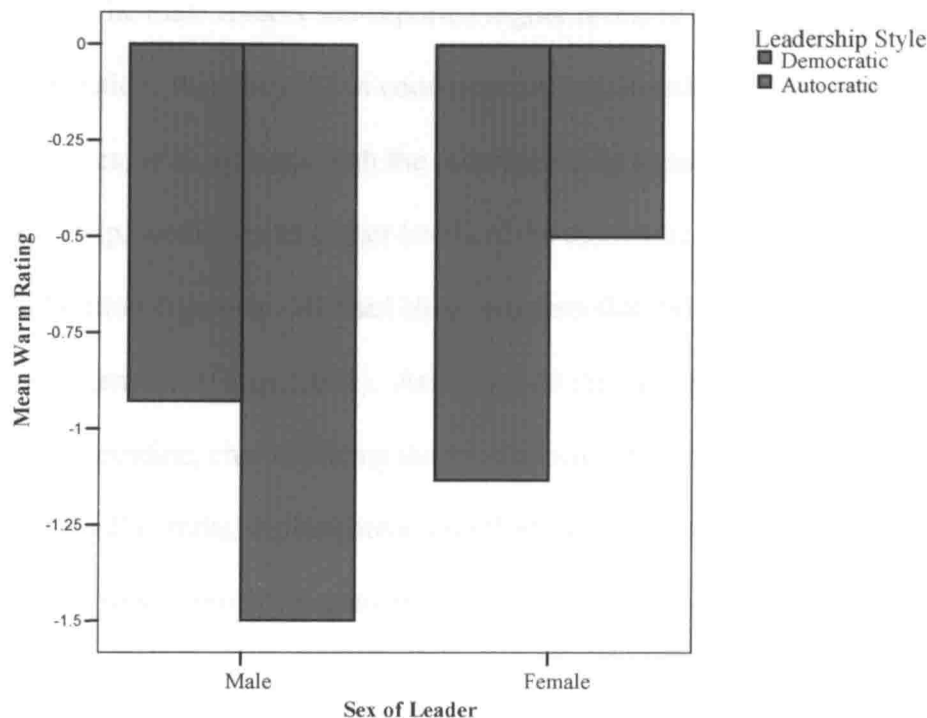


Figure 41: Warm Rating as a Function of Leader Sex and Leadership Style Used

## Discussion

### Study 1

*Leadership Styles and Behaviors.* In accordance with previous findings (Eagly & Johnson, 1990; Van Engen & Willemssen, 2004), the male and female leaders surveyed in this research reported using different leadership styles. The male leaders reported higher levels of the autocratic-task style while female leaders self-reported higher levels of the democratic-relationship style. These findings suggest that men and women lead in styles that are in accordance with their traditional gender roles. The autocratic-task style that men used is consistent with masculine characteristics while women reported using a democratic-relationship style, which is characterized as a feminine leadership style. Gender role spillover into the leadership positions or pressure to fulfill gender roles may be affecting the style used.



The male leaders self-reported higher levels of the autocratic-task style in single-sex organizations than they did in coeducational organizations. This finding supports the hypothesis that males, in accordance with the prototypicality argument, of social identity theory of leadership, would report higher levels of the autocratic style in all-male groups than in coeducational groups. Michael Hogg suggests that the leader of an organization is typical of the group members (Hogg, 2001). According to this argument, leaders of all-male groups should be more masculine, characterizing the membership. Since the autocratic-task style is characterized by masculine traits, the heightened level of this style in single-sex organizations is consistent with the prototypicality argument. Men leading single-sex organizations are practicing an autocratic-task style, which may not be well received in coeducational groups. While the traits traditionally associated with the leadership domain are masculine and more in line with the autocratic characteristics, group members tend to be more satisfied with a democratic-relationship style, which is supported by the results of Study 2. Men leading all-male groups may need to enact a different style in future leadership positions if the group they are working with is coeducational.

The female leaders, however, did not illustrate this pattern. In regards to the leadership style used by female leaders, I presented two contrasting hypotheses supported by past research. I first hypothesized that because groups tend to be increasingly dissatisfied with autocratic female leaders as the number of male members increases, female leaders would report using a less democratic style and a more autocratic style in all-female organizations than in coeducational groups. I also presented a hypothesis in accordance with the prototypicality argument. I hypothesized that women leading single-sex groups would characterize the female group members and report higher levels of the feminine, democratic style, and lower levels of

the more masculine style, which is the autocratic style. These hypotheses were not supported by the data, which revealed that women report similar levels of the democratic-relationship style in single-sex and coeducational groups. This finding suggests that female leaders of single-sex organizations are not practicing a different leadership style, one that may be inappropriate for coeducational groups, but rather using a style similar to that of their counterparts leading mixed-sex groups. This mitigates the concern that single-sex leadership positions for women do not adequately prepare women to lead post-graduation in real world, formal positions of leadership, which are generally mixed-sex.

The two leadership behaviors that revealed significant sex differences are friendly behaviors and mentoring behaviors. Women leaders reported higher levels of friendly behavior than their male counterparts. This is consistent with women's higher level of democratic-relationship style and with the traditional female gender role, further supporting the idea that gender roles affect women's leadership roles. Men reported higher levels of mentoring than women. A meta-analytic review of the literature on the effects of mentoring behavior indicated that mentoring improves career outcomes for individuals (Underhill, 2006). It is imperative that women, especially those in the upper echelons of male-dominated fields, mentor other females in order to break through the glass ceiling and increase the number of women in influential and formal leadership positions. This finding is also problematic if the current lack of female mentoring is predictive of future mentoring behavior. The need for female mentors will not be met unless the importance of this behavior is stressed to women. Underhill (2006) also revealed that informal mentoring produced a larger and more significant effect on career outcomes than formal mentoring. This further suggests the need for women leaders to mentor other females

because the “old boy’s network” provides this informal mentoring for men but excludes women, placing females at an unfair disadvantage.

Unexpected findings in regards to leadership behaviors were group composition effects for five behaviors. Male and female leaders reported higher levels of monitoring behavior, delegating behavior, consulting behavior, upward influence behavior, and networking behavior in single-sex organizations than in coeducational organizations. Perhaps these behaviors are more important for leadership effectiveness in the single-sex organizations at the University of Richmond than the coeducational groups targeted in this study or perhaps single-sex groups in general require these leadership behaviors to a greater extent than do mixed-sex groups.

*Perceptions of Effective Leadership.* The leaders surveyed in this study reported using the leadership styles they perceived as effective. As hypothesized, perceptions of effective leadership were closely correlated with self-reported styles of leadership. Leaders’ perceptions of effective levels of the democratic-relationship style were closely correlated with the self-reported levels of use as were the perceived effective levels of the autocratic-task style with the levels reported.

According to Schein (2001), recent studies have shown that in the United States women, compared to men, generally have a more androgynous view of leadership, recognizing the need for communal qualities along with agentic ones. This is illustrated by the close correlation of women’s view of effective leadership and their reported democratic-relationship style. It is also supported by the close correlation between male leaders’ views of effective leadership and their reported autocratic-task style, portraying that their view of leadership is more traditional in that it is consistent with the agentic, masculine characteristics of the autocratic-task style.

Although perceptions of effective leadership were closely correlated with the leadership styles used, data revealed that men are less likely than women to enact the democratic-relationship style to the extent to which they perceive it as effective. This discrepancy suggests that men are affected by gender-role spillover. The male leaders conformed to their traditional gender role, which emphasizes the importance of masculinity, by not reporting the democratic-relationship style to the extent they believed it effective. Similarly, women had more discrepancy than men between self-reported levels of autocratic-task style and the levels perceived as effective. This finding also supports gender-role spillover; women were conforming to their traditional gender role in their leadership positions by reporting leadership styles in accordance with femininity and by not reporting the autocratic-task style to the extent they perceived it as effective.

Men leading single-sex organizations had less discrepancy between self-reported levels of autocratic-task style and levels perceived as effective than did their counterparts leading coeducational groups. This finding is consistent with the data on self-reported use of the autocratic-task style and the prototypicality argument that was supported by the same data. Male leaders of single-sex organizations reported higher levels of the autocratic-task style than male leaders of coeducational groups, which minimized the discrepancy for the men leading single-sex groups.

*Self-Efficacy.* Male leaders of single-sex organizations reported higher levels of self-efficacy than their counterparts leading coeducational organizations. The opposite was true for women; female leaders of coeducational organizations reported higher levels of self-efficacy than females leading single-sex groups. This interaction can be understood with the prototypicality argument which suggests that people who are typical of the group are chosen to

be the leader. Males are traditionally more associated with leadership characteristics than females, so as the number of male group members increases, the leadership characteristics of the chosen leader increase as well. The more associated the leader is with leadership characteristics, the higher their leadership self-efficacy will be. This increase in leadership traits with the increase of male group members is illustrated by higher self-efficacy levels reported by male leaders of all-male groups than male leaders of coeducational groups and by the higher self-efficacy levels of female leaders of mixed-sex groups than female leaders of all-female groups. Despite this interaction, all leaders, regardless of sex and group composition, reported significantly higher levels of self-efficacy than non-leaders. This finding supports my hypotheses about self-efficacy. I hypothesized that both male and female leaders would report higher levels of leadership self-efficacy than non-leaders. I also hypothesized that this would be true for leaders of both group compositions, single-sex and coeducational. This data reveals the importance of leadership experience for men and women regardless of the composition of the group.

Much literature shows that self-efficacy influences what people choose to do, suggesting that leaders with high levels of self-efficacy will be more likely to seek out future leadership roles than people with low levels of self-efficacy, especially in the leadership domain (Bandura, 1982; Bandura and Cervone, 1983; Bandura & Wood, 1989). Not only do high levels of self-efficacy increase the probability of holding leadership positions in the future but also increases the probability of being a highly successful leader. Chemers (2002) proposes three critical functions of effective leadership: image management, relationship development, and resource deployment. Image management regards the followers' perceptions of the leader, relationship development is dependent on the leader's ability to recognize capabilities and talents of

followers, and resource deployment is finding the most appropriate leadership style for the environment and situation. Chemers writes that high levels of self-efficacy enhance all three of these imperative functions. Chemers goes further and argues that outstanding levels of leadership are not possible without high levels of confidence in the leadership role. Self-efficacy plays an integral role in both motivation and performance, illustrating again, how imperative efficacy development is for leaders (Bandura, 1997).

*Domain Identification and Intent to Lead in the Future.* Leaders of single-sex groups reported a higher identification with the leadership domain than leaders of coeducational groups. This effect was particularly strong for the males, which is consistent with the prototypicality argument. As the ratio of male group members increases, so do the leadership characteristics of the leader, which increases the identification with the leadership domain. This pattern was not seen for the females; however, more importantly, all leaders reported higher levels of domain identification than non-leaders. Increasing the importance of leadership is likely to increase the leader's desire to lead in future positions post-graduation.

Females reported intent to lead in the future to a greater extent than males, which may be due to the visibility of women in positions of leadership on the University of Richmond campus, both in student and administrative leadership roles. This supports Dasgupta and Asgari's (2004) correlational data, which reveals that women's automatic gender stereotypes about their ingroup can be undermined and changed if they are placed in an environment where women hold counterstereotypic leadership roles. As a result of being exposed to more counterstereotypical leaders, women's automatic "think leader, think male" stereotype may be deteriorating, allowing women to think of themselves and other females when thinking about leadership roles.

All leaders, however, reported a greater intent to lead in the future than non-leaders. This further supports the importance of leadership experience, especially for women. It is imperative that women have access to female leadership positions to increase their intent to lead in the future and better the numbers of formal leadership positions in society held by women. This data suggests that leadership experience likely leads to greater self-efficacy, domain identification, and intent to lead in the future. While this data is not causal, it supports the idea that people with leadership experience will more likely feel confident leading, be interested in fulfilling a leadership role, and seek out leadership positions in the future.

## Study 2

This vignette study revealed very interesting findings about perceptions and evaluations of leaders. In accordance with past research that concludes women are evaluated less favorably than men enacting identical behavior, I hypothesized that respondents would rate male leaders more positively than female leaders (Eagly, Makhijani & Klonsky, 1992; Van Fleet & Saurage, 1984). This hypothesis was not supported by the vignette study. In fact, women were evaluated more positively than male leaders. They were rated as less disagreeable, more likable, and warmer than their male counterparts. Similar results were revealed by Gary Powell's (2006) recent research on evaluations of transformational leaders. Females were rated more favorably than males in his study as well (Powell, 2006). Contemporary journalists and authors are also articulating a female advantage in leadership, arguing that women are more likely than men to enact a leadership style that is appropriate in current organizations (Eagly & Carli, 2003). These authors believe the new appropriate leadership style encourages a reduction of hierarchy and places the leader in more of a teacher or coach role than traditional views of leadership, which

encourage leaders to be directive and masculine. These authors of popular books on leadership articulate that effective leadership is now consistent with the way women lead (Book, 2000; Helgesen, 1990; Rosener, 1995).

Since scholars have articulated an aversion to autocratic leadership, I also hypothesized that respondents would rate leaders using a democratic style more positively than leaders using an autocratic style. I hypothesized that this preference for a democratic style would be seen for both men and women, and across both group compositions, single-sex and coeducational. These hypotheses were supported by the data, which revealed a preference for democratic leadership. In single-sex conditions, respondents reported democratic leaders as being more approachable, more likeable, and better listeners than autocratic leaders. Respondents also reported that they would more likely want to be a member of a democratic leader's group than an autocratic leader's organization. Similarly, in coeducational organizations, respondents reported democratic leaders as being more likable, more competent, better listeners, and as having a more appropriate leadership style than autocratic leaders. These findings support the literature that states that followers are unhappy with the lack of decision-making power under autocratic leaders (Nielsen & Miller, 1997; Peterson, 1997; Rutte & Wilke, 1985; Samuelson, 1993; Van Vugt & De Cremer, 1999).

More specifically, consistent with previous research that reveals that it is more acceptable for men to enact an autocratic style than women, I hypothesized that autocratic women would be more negatively evaluated by respondents than autocratic men (Eagly, Makhijani & Klonsky, 1992). This hypothesis was not supported by the data. Respondents rated women more positively across both group compositions and across both leadership styles, which again,



reflects the arguments of contemporary authors of popular books on leadership, which state that women now have a leadership advantage over men.

An interaction in the single-sex conditions further supports the documented dislike for autocratic leaders. Respondents reported that males were better suited to lead all-male groups when they were acting democratically than when they were leading autocratically. Respondents also rated that a male leader would be well suited to lead an all-female group when the current leader was acting autocratically, suggesting the respondents wanted the autocratic leaders replaced. The aversion to autocratic leaders was also revealed in coeducational conditions. Respondents reported that they would be more dissatisfied with an autocratic leader than a democratic one.

I hypothesized that since past studies have documented that female leaders are more harshly evaluated by men, respondents would rate autocratic female leaders more negatively in coeducational groups than in all-female organizations. This hypothesis, however, was not supported by the data. In coeducational groups, autocratic female leaders were actually rated as warmer than democratic female leaders. Respondents reported that they would feel more 'comfortable' approaching an autocratic female leader in the coeducational conditions than a democratic one. The opposite was true for the men: respondents reported that they would feel more comfortable approaching a male democratic leader than an autocratic one in coeducational institutions. Mirroring this interaction, there was also an interaction for 'uneasiness' approaching the leaders. This interaction followed the same pattern: respondents reported that they would be more uneasy approaching a female democratic leader than an autocratic one but more uneasy approaching an autocratic male leader than a democratic one in coeducational conditions. These results are not supportive of the previous finding that democratic behavior is

preferred. A possible explanation of these interactions is that respondents rated autocratic female leaders of coeducational groups as warmer than their democratic counterparts, which would make them more approachable. While the data did reveal that respondents believe females are better suited to lead in democratic styles than in autocratic styles, female autocratic leaders in the coeducational conditions were not penalized with an overly harsh evaluation.

Study 1 revealed that female leaders on the whole reported using the democratic-relationship style, which is in accordance with their traditional gender role. This use of the democratic style, however, is beneficial for women. Study 2 revealed that overall, people are negatively evaluated when leading with an autocratic style. This finding also has important implications for Study 1 in that males leading single-sex organizations, who are reporting high levels of the autocratic-task style, may be using a style that is not well received by group members and will be negatively evaluated by future followers.

Also, leaders surveyed in Study 1 reported enacting leadership styles that they perceived as effective. Traditionally, leadership is viewed more in accordance with the masculine styles that men perceived as effective, which places the women at a disadvantage. In order to increase the number of women in formal leadership positions, to help close the leadership gap, the perception of effective leadership needs to change to include the more democratic-relationship style commonly enacted by women. The vignettes study, along with contemporary authors, suggests that this change may be occurring.

### *Implications*

*Practical Implications.* This research suggests the importance of leadership experience, and because of the scarcity of women in influential, formal positions of leadership, especially for women. Leaders reported higher levels of self-efficacy, identification with the leadership

domain, and intent to lead in the future than non-leaders. This suggests that one way to increase the number of women in formal leadership roles is to provide them with leadership experience.

The data revealed that women lead with similar styles in both single-sex and coeducational groups, which eliminates the concern that single-sex leadership positions do not adequately prepare women to lead in future, mixed-sex groups. This suggests the importance of supportive environments for women that allow them to gain leadership experience. This environment can be attained through single-sex schools or single-sex leadership positions within a coeducational institution. This data supports the structure of the University of Richmond with its female leadership opportunities.

Men leading single-sex organizations, however, reported enacting a different leadership style than their counterparts leading coeducational groups. Males leading single-sex groups reported using a more autocratic style than men leading coeducational groups. This may be problematic for the male leaders of single-sex organizations when in future leadership roles because as the data suggests, group members prefer a democratic leader to an autocratic one. Men leading single-sex groups may be practicing a leadership style that will not be well received in future mixed-sex environments.

*Theoretical Implications.* The prototypicality argument was supported throughout this data, as was gender-role spillover. The argument that chosen leaders are typical of the group as a whole has important implications in understanding the scarcity of women in upper-level positions of business and government. Both business and government are male-dominated domains and thus choose leaders that characterize masculinity. This places women at a disadvantage since gender-role spillover supports the idea that women lead in a style that is in accordance with their femininity. The organizations are harmed as well since data reveals that

social perceivers prefer democratic leadership. Not only is the democratic style perceived more positively but women were rated more positively than men as well. This finding stresses the importance of future research on gender, leadership, and evaluation.

#### *Limitations and Future Directions.*

By the nature of survey research, this data is not causal. All survey measures in Study 1 were self-report, which is important to keep in mind. It is important for future research to use different methodologies to test causal relationships. There is also low external validity as the respondents were limited to students at the University of Richmond. However, the results could possibly generalize to other schools operating on a coordinate system, which is something that future research can examine. The coordinate system at the University of Richmond, however, provided a unique opportunity to examine single-sex versus coeducational groups, which was the focus of this thesis.

Further research is needed on the prototypicality argument to address its effects in single-sex versus coeducational organizations. It is imperative that we understand the effects of prototypes in all group compositions to effectively address the absence of women in influential leadership positions in our society. It is also important that we learn how to move beyond prototypicality in domains that have long been dominated by white males in order to increase the number of women and other minorities in influential leadership roles. Examining how to move beyond the prototypicality argument is also important because in accordance with the argument, men leading single-sex organizations use an autocratic style, which is negatively evaluated by social perceivers. Research should examine ways to allow men leading single-sex groups to practice a more democratic style and should study whether leaders who have practiced an autocratic style in single-sex organizations are able to successfully enact a different style when

leading in a mixed-sex environment. Future research should also address the behaviors necessary for effective leadership in all group compositions. The data suggests that leaders of single-sex groups use different levels of leadership behaviors than do leaders of mixed-sex organizations but the reason why is not clear. It would be beneficial to examine the leadership needs of single-sex groups, regardless of the leader's sex.

### *Conclusions.*

The vast majority of the research in this thesis focuses on the United States specifically but the scarcity of women in influential leadership roles is a worldwide problem that needs to be addressed. This research revealed a strong preference for democratic leadership, the style generally associated with and enacted by women, and a more positive evaluation of female leaders than male leaders. This further suggests the importance of female leaders. The research also offers hope in that leadership experience can increase self-efficacy, domain identification, and intent to lead in the future. By providing women with leadership opportunities, as is done at the University of Richmond, we can continue the work towards a more gender equitable society that makes use of all its resources.

## References

- Astin, A. (1993). *What matters in college: Four critical years revisited*. San Francisco: Jossey-Bass.
- Astin, H. S., & Kent, L. (1983). Gender roles in transition: Research and policy implications for higher education. *Journal of Higher Education*, 54, 309-324.
- Astin, H.S., & Leland, C. (1991). *Women of influence, women of vision: A cross-generational study of leaders and social change*. San Francisco: Jossey-Bass.
- Bandura, A. (1982). Self-efficacy mechanism in human agency. *American Psychologist*, 37, 122-147.
- Bandura, A. (1997). *Self-efficacy: The exercise of control*. New York: W.H. Freeman.
- Bandura, A., & Cervone, D. (1983). Self-evaluative and self-efficacy mechanisms governing the motivational effects of goal systems. *Journal of Personality and Social Psychology*, 45, 1017-1028.
- Bandura, A., & Wood, R. (1989). Effect of perceived controllability and performance standards on self-regulation of complex decision-making. *Journal of Personality and Social Psychology*, 56, 805-814.
- Bass, B.M. (1990) *Bass & Stogdill's handbook of leadership: Theory, Research & Managerial Applications* (rev. ed.). New York: Free Press.
- Book, E. W. (2000). *Why the best man for the job is a woman: The unique female qualities of leadership*. New York: Harper Business.
- Brenner, M. M. (1970). *Management development activities for women*. Paper, American Psychological Association, Miami.
- Carli, L.L., & Eagly, A. H. (2001). Gender, Hierarchy, and Leadership: An Introduction. *Journal*

*of Social Issues*, 57, 629-636.

Catalyst, 2005 <http://www.catalystwomen.org/files/fact/Stereotype%20factsheet.pdf>

Chemers, M. M. (2002). Efficacy and effectiveness: Integrating models of leadership and intelligence. In Riggio, R. E., Murphy, S. E. & Pirozzolo, F. J. (Eds.) *Multiple intelligences and leadership*. Mahwah, NJ, Lawrence Erlbaum Associates.

Crosby, F., Iyer, A., Clayton, S., & Downing, R. (2003). Affirmative action: Psychological data and the policy debates. *American Psychologist*, 58, 93-115.

Dasgupta, N., & Asgari, S. (2004). Seeing is believing: exposure to counterstereotypic women leaders and its effect on the malleability of automatic gender stereotyping. *Journal of Experimental Social Psychology*

Eagly, A.H., & Carli, L. L. (2003). The female leadership advantage: An evaluation of the evidence. *The Leadership Quarterly*, 14, 807 – 834.

Eagly, A. H., & Johnson, B.T. (1990). Gender and leadership style: a meta-analysis. *Psychological Bulletin*, 108, 233-256.

Eagly, A. H., & Karau, S. (2002). Role congruity theory of prejudice toward female leaders. *Psychological Review*, 109, 573-598.

Eagly, A. H., Karau, S.J., & Makhijani, M.G. (1995). Gender and the effectiveness of leaders: a meta-analysis. *Psychological Bulletin*, 117, 125-145.

Eagly, A.H., Makhijani, M.G., & Klonsky, B.G. (1992). Gender and the evaluation of leaders: a meta-analysis. *Psychological Bulletin*, 111, 3-22.

Foels, R., Driskel, J.E., Mullen, B. & Salas, E. (2000). The effects of democratic leadership on group member satisfaction: an integration. *Small Group Research*, 31, 676–701.

Forest, L., Hotelling, K., & Kuk, L. (1984, July). *The elimination of sexism in the university*

*environment*. Paper presented at the Second Annual Student Development Through Campus Ecology Symposium, Pingree Park, CO.

Fortune Magazine, November 14, 2005

Friedman, T.L. (2005). *The World is Flat: A Brief History of the Twenty-First Century*. New York: Farrar, Straus and Giroux.

Guido-DiBrito, F., & Batchelor, S.W. (1988). Developing leadership potential through student activities and organizations. In M.A.D. Sagaria (Ed.), *Empowering women: Leadership development strategies on campus* (pp. 51-62). New Directions for Student Services, No. 44. San Francisco: Jossey-Bass.

Helgesen, S. (1990). *The female advantage: Women's ways of leadership*. New York: Doubleday Currency.

Hogg, M. A. (2001). A social identity theory of leadership. *Personality and Social Psychology Review*, 5, 184–200.

Hoyt, C. & Blascovich, J. (2006). Leadership Efficacy and Women Leaders' Responses to Stereotype Activation. Manuscript submitted for publication.

Hoyt, C., Murphy, S., Halverson, S., & Watson C. (2003). Group leadership: Efficacy and effectiveness. *Group Dynamics: Theory, Research, and Practice*, 7, 259-274.

Keohane, N. O. (1984, April). To include us all: Preparing women for leadership. *Independent School*, pp. 29-34.

Kushell, E., & Newton, R. (1986). Gender, leadership style, and subordinate satisfaction: An experiment. *Sex Roles*, 14, 203–209.

Lee, V. E., & Bryk A.S. (1986). Effects of single-sex secondary schools on student achievement and attitudes. *Journal of Educational Psychology*, 78, 381-395.



- Marsh, H. W. (1989) Effects of attending single-sex and coeducational high schools on achievement, attitudes, behaviors and sex differences. *Journal of Educational Psychology*, 81, 70-85.
- Martell, R. F., & DeSmet, A. L. (2001). A diagnostic-ratio approach to measuring beliefs about the leadership abilities of male and female managers. *Journal of Applied Psychology*, 86(6), 1223-31.
- Miller-Bernal, L. "Single-Sex versus Coeducational Environments: A Comparison of Women Students' Experiences at Four Colleges." *American Journal of Education*, 1993, 102 (11), 23-54.
- Murphy, S. E. (2002). Leader self-regulation: The role of self-efficacy and multiple intelligences. In Riggio, R. E., Murphy, S.E. & Pirozzolo, F. J. (Eds.) *Multiple intelligences and leadership*. Mahwah, NJ: Lawrence Erlbaum Associates.
- Murphy, S. E. (1992). *The contribution of leadership experience and self-efficacy to group performance under evaluation apprehension*. Unpublished doctoral dissertation, University of Washington, Seattle.
- Murphy, S. E., Chemers, M. M., Kohles, J., & Macaulay, J. L. (2003). *The contribution of leadership self-efficacy to performance under stress: An extension of cognitive resources theory*. Manuscript submitted for publication.
- Murphy, S. E., & Ensher, E. A. (1999). The effects of leader and subordinate characteristics in the development of leader-member exchange quality. *Journal of Applied Social Psychology*, 29, 1371-1394.
- Nielson, M.E., & Miller, C.E. (1997). The Transmission of norms regarding group rules. Personality and Social Psychology Bulletin. 23, 516-525.

- Northouse, P. G. (2001). Path-Goal Theory. In *Leadership: Theory and Practice* (Second Edition ed., pp. 89 - 109). Thousand Oaks, California: Sage Publications, Inc.
- Peterson, R. S. (1997). A directive leadership style in group decision-making can be both virtue and vice: Evidence from elite and experimental groups. Journal of Personality and Social Psychology, 72, 1107-1121.
- Petty, M. M., & Lee, Gordon, K. (1975). Moderating effects of sex of supervisor and subordinate on relationships between supervisory behavior and subordinate satisfaction. *Journal of Applied Psychology*, Vol 60(5), Oct 1975, 624-628.
- Powell, G. (2006). Sex effects in evaluations of transformational leaders: An advantage for female leaders. Talk presented at Center to Public Leadership 5<sup>th</sup> Annual Leadership Conference: Leadership 2006: Women and Leadership.
- Powell, G. N., & Butterfield, D. A. (1989). The “good manager”: Did androgyny fare better in the 1980s? *Group and Organization Studies*, 14, 216–233.
- Ridgeway CL. 1982. Status in groups: the importance of motivation. *Am. Sociol. Rev.* 47:76–88.
- Riordan, C. (1994). The value of attending a women's college: education, occupation, and income benefits. *Journal of Higher Education*, 65(4), 486-510.
- Rosener, J. B. (1995). *America's competitive secret: Utilizing women as management strategy*. New York: Oxford University Press.
- Rutte, C.G., & Wilke, H. A. M. (1985). Preference for decision structures in a social dilemma situation. European Journal of Social Psychology, 15, 367-370.
- Sagaria, M. A. D. (1988). The case for empowering women as leaders in higher education. In M.A.D. Sagaria (Ed.), *Empowering women: Leadership development strategies on campus* (pp. 5-12). New Directions for Student Services, No. 44. San Francisco: Jossey-

Bass.

- Samuelson, C. D. (1993). A multivariate evaluation approach to structural change in resource dilemmas. Organizational Behavior and Human Decision Processes, 55, 298-324.
- Schein, V. E. (2001). A global look at psychological barriers to women's progress in management. *Journal of Social Issues*, 57, 675-688.
- Shapka, J. D., & Keating, D. P. (2003). Effects of a girls-only curriculum during adolescence: performance, persistence, and engagement in mathematics and science. *American Educational Research Journal*, 40, 929-260.
- Sutton, C.D., & Moore, K. K. (1985). Executive Women – 20 years later. *Harvard Business Review*, 63(5), 42-66.
- Tidball, M. F. (1973). Perspective on academic women and affirmative action. *Educational Record* 54, 130-135.
- Umbach, P.D., Kinzie, J. L., Thomas, A. D., Plamer, M. M., & Kuh, G.D. (2004). Women Students at coeducational and women's colleges: How do their experiences compare?
- Underhill, C. M. (2006). The effectiveness of mentoring programs in corporate settings: A meta-analytical review of the literature. *Journal of Vocational Behavior*, 68(2), 292 – 307.
- Van Engen, M.L., & Willemsen, T.M. (2004). Sex and leadership styles: a meta-analysis of research published in the 1990s. *Psychol Rep.* 94(1), 3-18.
- Van Fleet, D., & Saurage, J. (1984, Summer). Recent research on women in management. *Akron Business and Economic Review*, 15–24.
- Van Vugt, M., & De Cremer, D. (1999). Leadership in social dilemmas: The effects of group identification on collective actions to provide public goods. Journal of Personality and Social Psychology, 76, 587-599.

- Van Vugt, M., Jepson, S., Hart, C., & De Cremer, D. (2004). Autocratic leadership in social dilemmas: A threat to group stability. *Journal of Experimental Social Psychology, 40*, 1-13.
- Whitt, E. J. (1994). "I can be anything!": Student leadership in three women's colleges. *Journal of College Student Development, 35*(3), 198-207.
- Wilson, M. C. (2004). *Closing the Leadership Gap*. New York: Penguin Group.

## Appendix A

## List of organizations represented:

## Single-Sex Greek Organizations

- ❖ Alpha Chi Omega
- ❖ Delta Gamma
- ❖ Delta Delta Delta
- ❖ Pi Kappa Alpha
- ❖ Sigma Alpha Epsilon
- ❖ Phi Gamma Delta
- ❖ Phi Delta Theta

## Coeducational Greek Organizations

- ❖ Alpha Phi Omega

## Single-Sex Student Governments

- ❖ Westhampton College Government Association
- ❖ Richmond College Student Government Association

## Coeducational Student Governments

- ❖ Judicial Council
- ❖ Honor Council
- ❖ Jepson Student Government Associations

## Coeducational Political Organizations

- ❖ University of Richmond Young Democrats
- ❖ College Republicans

## Coeducational Religious Organizations

- ❖ IV Christian Fellowship
- ❖ Rho Iota

## Single-Sex Interest Groups

- ❖ Women Involved in Living and Learning

## Coeducational Interest Groups

- ❖ Multicultural Student Union

## Appendix B Consent Form

### Principle Investigator

Alyson Emrick, (804) 662-3562. If you have any questions or concerns, please email [aly.emrick@richmond.edu](mailto:aly.emrick@richmond.edu).

### Project Description

The purpose of this survey research is to explore the effect of student leadership positions on the leader. If you agree to participate, you will be asked to complete a series of questionnaires. The surveys will take approximately twenty minutes.

### Voluntary Participation

You may refuse to participate or withdraw from this study at anytime without penalty or loss of benefits to which you are entitled.

### Confidentiality of Records

Your identity will be kept confidential by replacing personally identifying information with a code number in the data files. Only the Principle Investigator will have access to identifiable data.

### Participant's Rights Information

If you have any questions concerning your rights as a research participant, you may contact the Chair of the University of Richmond's Institutional Review Board for the Protection of Research Participants at 289-8417 for information or assistance.

### Participant's Consent

The study has been described to me and I understand that my participation is voluntary and that I am free to withdraw my consent and discontinue my participation in the project at any time without penalty. I also understand that the results of the study will be treated in strict confidence and will be reported as group data sets without personally identifying information, possibly in scholarly publications. I understand that if I have any questions or concerns about this experiment I may pose them to Alyson Emrick ([aly.emrick@richmond.edu](mailto:aly.emrick@richmond.edu)). I have read and understand the above information and I consent to participating in this study by signing below.

---

**Signature**

---

**Date**

---

**Signature of Investigator**

Please circle your answer.

### Background Information

1. Sex: Male Female

High School:

2. Public Private

3. Coeducational Single Sex

Mother's/ Mother Figure's Education:

4. High school diploma Some College B.A. M.A. Doctorate

Father's/ Father Figure's Education:

5. High school diploma Some College B.A. M.A. Doctorate

Mother/Mother figure:

6. Currently Employed Currently Unemployed Retired Stay at home parent

Father/ Father figure:

7. Currently Employed Currently Unemployed Retired Stay at home parent

### University of Richmond Information

8. Major(s): Humanities Math/Sciences Business Leadership

9. Minor(s): Humanities Math/Sciences Business Leadership N/A

10. Cumulative GPA: 4.0 – 3.5 3.4 – 3.0 2.9 – 2.5 2.4 – 2.0 below 2.0

11. Year: First Second Third Fourth Fifth

12. University of Richmond: Early decision Accepted Waitlisted Scholarship

### Current Leadership Position Information

13. Organization Name: \_\_\_\_\_

14. Number of members: \_\_\_\_\_ Number of Men: \_\_\_\_\_ Number of Women: \_\_\_\_\_

15. How long have you held this position? \_\_\_\_\_

16. a) How did you attain this position? Election Application Self-appointed Volunteer

16. b) If election, how many people did you run against? \_\_\_\_\_

17. a) Have you held leadership roles at UR prior to/in addition to this? Yes No

17. b) If so, how many positions? \_\_\_\_\_

18. a) For single sex organizations: If this organization were coeducational, would you have run for your leadership position? \_\_\_\_\_

18. b) For coeducational organizations: If this organization were single sex, would you have run for your position? \_\_\_\_\_

(For Non-Leaders)

Please circle your answer.

**Background Information**

1. Sex: Male                      Female

High School:

2. Public                                      Private

3. Coeducational                      Single Sex

Mother's/ Mother Figure's Education:

4. High school diploma      Some College      B.A.      M.A.      Doctorate

Father's/ Father Figure's Education:

5. High school diploma      Some College      B.A.      M.A.      Doctorate

Mother/Mother figure:

6. Currently Employed      Currently Unemployed      Retired      Stay at home parent

Father/ Father figure:

7. Currently Employed      Currently Unemployed      Retired      Stay at home parent

**University of Richmond Information**

8. Major(s): Humanities      Math/Sciences      Business      Leadership

9. Minor(s): Humanities      Math/Sciences      Business      Leadership      N/A

10. Cumulative GPA: 4.0 – 3.5      3.4 – 3.0      2.9 – 2.5      2.4 – 2.0      below 2.0

11. Year:      First      Second      Third      Fourth      Fifth

12. University of Richmond:      Early decision      Accepted      Waitlisted      Scholarship

**Organization Information**

13. Organization Name: \_\_\_\_\_

14. Number of members: \_\_\_\_\_ Number of Men: \_\_\_\_\_ Number of Women: \_\_\_\_\_

15. a) Have you held leadership roles at University of Richmond?      Yes      No

15. b) If so, how many positions? \_\_\_\_\_



Please indicate the extent to which you believe the following behavior categories are important for **effective leadership**. Please write the number corresponding to your answer on the line next to each item using the following scale:

Not at All Important								Extremely Important
-4	-3	-2	-1	0	1	2	3	4

- \_\_\_\_\_ Delegating – authorizing others to have substantial responsibility and discretion in making decisions and carrying out work activities
- \_\_\_\_\_ Inspiring – motivating others toward greater enthusiasm for and commitment to work objectives by appealing to emotion, values, logic, or personal example
- \_\_\_\_\_ Intellectual stimulation – exciting the abilities of others to perceive, learn, understand, or reason
- \_\_\_\_\_ Mentoring – facilitating the skill development and advancements of group members
- \_\_\_\_\_ Modeling – serving as a pattern or standard of excellence to be imitated
- \_\_\_\_\_ Monitoring – evaluating the performance of group members and the organizational unit for progress and quality and detecting potential threats and opportunities
- \_\_\_\_\_ Planning – designing objectives, strategies, and procedures for accomplishing goals and coordinating with other parts of the organization in the most efficient manner
- \_\_\_\_\_ Problem solving – identifying, analyzing, and acting decisively to eliminate impediments to work performance in a timely and systematic manner
- \_\_\_\_\_ Rewarding – providing praise, recognition, financial remuneration, or promotions when appropriate
- \_\_\_\_\_ Supporting – encouraging, assisting, and providing resources for others
- \_\_\_\_\_ Upward influence – affecting others in positions of higher rank or position
- \_\_\_\_\_ Networking – developing and maintaining relationships with others who may be resources of information or support
- \_\_\_\_\_ Team building – encouraging positive identification with the organizational unit, encouraging cooperation and constructive conflict resolution
- \_\_\_\_\_ Consulting – checking with others before making plans or decisions that affect them and inviting participation in decision making
- \_\_\_\_\_ Listening – carefully hearing what group members have to say
- \_\_\_\_\_ Friendly – befriending and forming positive relationships with group members

Please indicate the extent to which you use the following behavior categories in **your leadership**. Be as honest as possible by not overrating or devaluing your attributes. Please write the number corresponding to your answer on the line next to each item using the following scale:

Never								Always
-4	-3	-2	-1	0	1	2	3	4

- \_\_\_\_\_ Inspiring – motivating others toward greater enthusiasm for and commitment to work objectives by appealing to emotion, values, logic, or personal example
- \_\_\_\_\_ Problem solving – identifying, analyzing, and acting decisively to eliminate impediments to work performance in a timely and systematic manner
- \_\_\_\_\_ Monitoring – evaluating the performance of group members and the organizational unit for progress and quality and detecting potential threats and opportunities
- \_\_\_\_\_ Delegating – authorizing others to have substantial responsibility and discretion in making decisions and carrying out work activities
- \_\_\_\_\_ Consulting – checking with others before making plans or decisions that affect them and inviting participation in decision making
- \_\_\_\_\_ Rewarding – providing praise, recognition, financial remuneration, or promotions when appropriate
- \_\_\_\_\_ Modeling – serving as a pattern or standard of excellence to be imitated
- \_\_\_\_\_ Supporting – encouraging, assisting, and providing resources for others
- \_\_\_\_\_ Upward influence – affecting others in positions of higher rank or position
- \_\_\_\_\_ Planning – designing objectives, strategies, and procedures for accomplishing goals and coordinating with other parts of the organization in the most efficient manner
- \_\_\_\_\_ Networking – developing and maintaining relationships with others who may be resources of information or support
- \_\_\_\_\_ Friendly – befriending and forming positive relationships with group members
- \_\_\_\_\_ Mentoring – facilitating the skill development and advancements of group members
- \_\_\_\_\_ Team building – encouraging positive identification with the organizational unit, encouraging cooperation and constructive conflict resolution
- \_\_\_\_\_ Listening – carefully hearing what group members have to say
- \_\_\_\_\_ Intellectual stimulation – exciting the abilities of others to perceive, learn, understand, or reason

Please indicate the extent to which you believe the following are **important for effective leadership**. Please write the number corresponding to your answer on the line next to each item using the following scale:

Not at All Important						Extremely Important
-3	-2	-1	0	1	2	3

- \_\_\_\_\_ 1. The leader clarifies his/her own role within the group.
- \_\_\_\_\_ 2. The leader shows concern for the personal well-being of others.
- \_\_\_\_\_ 3. Group members' ideas are sought.
- \_\_\_\_\_ 4. The leader has trust in group members.
- \_\_\_\_\_ 5. The leader helps others feel comfortable in the group.
- \_\_\_\_\_ 6. The group establishes organizational goals.
- \_\_\_\_\_ 7. The leader develops a plan of action for the group.
- \_\_\_\_\_ 8. The leader responds favorably to suggestions made by others.
- \_\_\_\_\_ 9. It is the whole group's responsibility to achieve the organization's goals.
- \_\_\_\_\_ 10. The leader makes suggestions about how to solve problems.
- \_\_\_\_\_ 11. Decisions are made as a group.
- \_\_\_\_\_ 12. The leader uses fear to get tasks accomplished.
- \_\_\_\_\_ 13. The leader provides criteria for what is expected of the group.
- \_\_\_\_\_ 14. The leader uses threats when necessary.
- \_\_\_\_\_ 15. The leader makes his/her perspective clear to others.
- \_\_\_\_\_ 16. The leader shows confidence in group members.
- \_\_\_\_\_ 17. Organization goals are dictated.
- \_\_\_\_\_ 18. The leader helps group members get along.
- \_\_\_\_\_ 19. The leader shows little confidence in group members.
- \_\_\_\_\_ 20. Group members' ideas are used constructively.
- \_\_\_\_\_ 21. The leader provides a plan for how the work is to be done.
- \_\_\_\_\_ 22. The leader uses rewards as incentive.
- \_\_\_\_\_ 23. The leader treats others fairly.
- \_\_\_\_\_ 24. The leader makes the decisions.
- \_\_\_\_\_ 25. The leader knows the problems faced by group members.
- \_\_\_\_\_ 26. The leader acts without the input of group members.
- \_\_\_\_\_ 27. The leader uses punishment.
- \_\_\_\_\_ 28. There is resistance to the leader.
- \_\_\_\_\_ 29. The leader dictates group goals.
- \_\_\_\_\_ 30. The leader defines role responsibilities for each group member.
- \_\_\_\_\_ 31. Evaluations of group members are used.
- \_\_\_\_\_ 32. The leader communicates with group members.
- \_\_\_\_\_ 33. The leader shows flexibility in making decisions.
- \_\_\_\_\_ 34. Group members are comfortable talking to the leader about tasks.
- \_\_\_\_\_ 35. The leader acts friendly with members of the group.
- \_\_\_\_\_ 36. The leader tells group members what they are supposed to do.
- \_\_\_\_\_ 37. The leader behaves in a predictable manner toward group members.
- \_\_\_\_\_ 38. The leader discloses thoughts and feelings to group members.
- \_\_\_\_\_ 39. The leader sets standards of performance for group members.
- \_\_\_\_\_ 40. The leader encourages group members to do quality work.

Thinking about your leadership qualities, please indicate the extent to which **you agree with each of the following statements**. Please write the number corresponding to your answer on the line next to each item using the following scale:

Strongly Disagree						Strongly Agree
-3	-2	-1	0	1	2	3

- \_\_\_\_\_ 1. I show confidence in my group members.
- \_\_\_\_\_ 2. Group members' ideas are sought.
- \_\_\_\_\_ 3. I use fear to get tasks accomplished.
- \_\_\_\_\_ 4. I clarify my own role within the group.
- \_\_\_\_\_ 5. I have trust in my group members.
- \_\_\_\_\_ 6. It is the whole group's responsibility to achieve the organization's goals.
- \_\_\_\_\_ 7. I use threats when necessary.
- \_\_\_\_\_ 8. I use rewards as incentive.
- \_\_\_\_\_ 9. I encourage group members to do quality work.
- \_\_\_\_\_ 10. I help group members get along.
- \_\_\_\_\_ 11. I act friendly with members of the group.
- \_\_\_\_\_ 12. Decisions are made as a group.
- \_\_\_\_\_ 13. I set standards of performance for group members.
- \_\_\_\_\_ 14. I help others feel comfortable in the group.
- \_\_\_\_\_ 15. Organization goals are dictated.
- \_\_\_\_\_ 16. Group members' ideas are used constructively.
- \_\_\_\_\_ 17. The group establishes organizational goals.
- \_\_\_\_\_ 18. I use punishment in my leadership style.
- \_\_\_\_\_ 19. I know the problems faced by group members.
- \_\_\_\_\_ 20. I make the decisions.
- \_\_\_\_\_ 21. I complete review functions without the input of my group members.
- \_\_\_\_\_ 22. There is resistance to my leadership.
- \_\_\_\_\_ 23. I provide criteria for what is expected of the group.
- \_\_\_\_\_ 24. Evaluations of group members are used.
- \_\_\_\_\_ 25. I show concern for the personal well-being of others.
- \_\_\_\_\_ 26. My group members are comfortable talking to me about tasks.
- \_\_\_\_\_ 27. I show little confidence in my group members.
- \_\_\_\_\_ 28. I dictate group goals.
- \_\_\_\_\_ 29. I tell group members what they are supposed to do.
- \_\_\_\_\_ 30. I make suggestions about how to solve problems.
- \_\_\_\_\_ 31. I respond favorably to suggestions made by others.
- \_\_\_\_\_ 32. I make my perspective clear to others.
- \_\_\_\_\_ 33. I treat others fairly.
- \_\_\_\_\_ 34. I develop a plan of action for the group.
- \_\_\_\_\_ 35. I behave in a predictable manner toward group members.
- \_\_\_\_\_ 36. I define role responsibilities for each group member.
- \_\_\_\_\_ 37. I communicate with group members.
- \_\_\_\_\_ 38. I provide a plan for how the work is to be done.
- \_\_\_\_\_ 39. I show flexibility in making decisions.
- \_\_\_\_\_ 40. I disclose thoughts and feelings to group members.

Please indicate the extent to which **you agree with** each of the following statements. Please write the number corresponding to your answer on the line next to each item using the following scale:

Strongly Disagree						Strongly Agree
-3	-2	-1	0	1	2	3

- \_\_\_\_\_ 1. I feel that I know a lot more than most leaders about what it takes to be a good leader.
- \_\_\_\_\_ 2. I know what it takes to make a work group accomplish its tasks.
- \_\_\_\_\_ 3. In general, I am very good at leading a group of my peers.
- \_\_\_\_\_ 4. I am confident of my ability to influence a work group that I lead.
- \_\_\_\_\_ 5. I know what it takes to keep a work group running smoothly.
- \_\_\_\_\_ 6. I know how to encourage good work group performance.
- \_\_\_\_\_ 7. I feel comfortable allowing most group members to contribute to the task when I am leading a work group.
- \_\_\_\_\_ 8. Overall, I believe that I can lead a work group successfully.
- \_\_\_\_\_ 9. It is important for me to be selected as a group leader.
- \_\_\_\_\_ 10. Leadership is important to me.
- \_\_\_\_\_ 11. I am a good leader.
- \_\_\_\_\_ 12. Leadership skills will be important to my career.
- \_\_\_\_\_ 13. I am a leadership-oriented person.
- \_\_\_\_\_ 14. I have the ability to be a qualified leader.
- \_\_\_\_\_ 15. I have the ability to perform as a leader.
- \_\_\_\_\_ 16. I intend to hold a leadership position after graduation.
- \_\_\_\_\_ 17. I hope to be a leader in my community.
- \_\_\_\_\_ 18. I would like to have a leadership position during my career.
- \_\_\_\_\_ 19. I am prepared to lead after college.
- \_\_\_\_\_ 20. I plan to hold future leadership positions.
- \_\_\_\_\_ 21. I experience stress in leadership roles.
- \_\_\_\_\_ 22. I find leadership positions to be stressful.
- \_\_\_\_\_ 23. Leadership roles cause me added stress.

Never or Almost Never True						Always or Almost Always True
-3	-2	-1	0	1	2	3

Please indicate how well each item below **describes** you. Please write the number corresponding to your answer on the line next to each item using the scale provided above.

- \_\_\_\_\_ 1. Self-Reliant
- \_\_\_\_\_ 2. Yielding
- \_\_\_\_\_ 3. Assertive
- \_\_\_\_\_ 4. Defends own beliefs
- \_\_\_\_\_ 5. Cheerful
- \_\_\_\_\_ 6. Moody
- \_\_\_\_\_ 7. Independent
- \_\_\_\_\_ 8. Shy
- \_\_\_\_\_ 9. Conscientious
- \_\_\_\_\_ 10. Athletic
- \_\_\_\_\_ 11. Affectionate
- \_\_\_\_\_ 12. Theatrical
- \_\_\_\_\_ 13. Helpful
- \_\_\_\_\_ 14. Flatterable
- \_\_\_\_\_ 15. Happy
- \_\_\_\_\_ 16. Strong Personality
- \_\_\_\_\_ 17. Loyal
- \_\_\_\_\_ 18. Unpredictable
- \_\_\_\_\_ 19. Forceful
- \_\_\_\_\_ 20. Feminine
- \_\_\_\_\_ 21. Reliable
- \_\_\_\_\_ 22. Analytical
- \_\_\_\_\_ 23. Sympathetic
- \_\_\_\_\_ 24. Jealous
- \_\_\_\_\_ 25. Has leadership abilities
- \_\_\_\_\_ 26. Sensitive to the needs of others
- \_\_\_\_\_ 27. Truthful
- \_\_\_\_\_ 28. Willing to take risks
- \_\_\_\_\_ 29. Understanding

- \_\_\_\_\_ 30. Secretive
- \_\_\_\_\_ 31. Makes decisions easily
- \_\_\_\_\_ 32. Compassionate
- \_\_\_\_\_ 33. Sincere
- \_\_\_\_\_ 34. Self-sufficient
- \_\_\_\_\_ 35. Eager to soothe hurt feelings
- \_\_\_\_\_ 36. Conceited
- \_\_\_\_\_ 37. Dominant
- \_\_\_\_\_ 38. Soft-spoken
- \_\_\_\_\_ 39. Likable
- \_\_\_\_\_ 40. Masculine
- \_\_\_\_\_ 41. Warm
- \_\_\_\_\_ 42. Solemn
- \_\_\_\_\_ 43. Willing to take a stand
- \_\_\_\_\_ 44. Tender
- \_\_\_\_\_ 45. Friendly
- \_\_\_\_\_ 46. Aggressive
- \_\_\_\_\_ 47. Gullible
- \_\_\_\_\_ 48. Inefficient
- \_\_\_\_\_ 49. Acts as a leader
- \_\_\_\_\_ 50. Childlike
- \_\_\_\_\_ 51. Adaptable
- \_\_\_\_\_ 52. Individualistic
- \_\_\_\_\_ 53. Does not use harsh language
- \_\_\_\_\_ 54. Unsystematic
- \_\_\_\_\_ 55. Competitive
- \_\_\_\_\_ 56. Loves children
- \_\_\_\_\_ 57. Tactful
- \_\_\_\_\_ 58. Ambitious
- \_\_\_\_\_ 59. Gentle
- \_\_\_\_\_ 60. Conventional

## Appendix C

1. Friendly – befriending and forming positive relationships with group members
2. Mentoring – facilitating the skill development and advancements of group members
3. Monitoring – evaluating the performance of group members and the organizational unit for progress and quality and detecting potential threats and opportunities
4. Delegating – authorizing others to have substantial responsibility and discretion in making decisions and carrying out work activities
5. Consulting – checking with others before making plans or decisions that affect them and inviting participation in decision making
6. Upward influence – affecting others in positions of higher rank or position
7. Networking – developing and maintaining relationships with others who may be resources of information or support
8. Problem solving – identifying, analyzing, and acting decisively to eliminate impediments to work performance in a timely and systematic manner



## Appendix D

1. The leader clarifies his/her own role within the group.
2. The leader shows concern for the personal well-being of others.
3. Group members' ideas are sought.
4. The leader has trust in group members.
5. The leader helps others feel comfortable in the group.
6. The group establishes organizational goals.
7. The leader develops a plan of action for the group.
8. The leader responds favorably to suggestions made by others.
9. It is the whole group's responsibility to achieve the organization's goals.
10. The leader makes suggestions about how to solve problems.
11. Decisions are made as a group.
12. The leader uses fear to get tasks accomplished.
13. The leader provides criteria for what is expected of the group.
14. The leader uses threats when necessary.
15. The leader makes his/her perspective clear to others.
16. The leader shows confidence in group members.
17. The leader helps group members get along.
18. The leader shows little confidence in group members.
19. Group members' ideas are used constructively.
20. The leader provides a plan for how the work is to be done.
21. The leader treats others fairly.
22. The leader makes the decisions.
23. The leader uses punishment.
24. There is resistance to the leader.
25. The leader dictates group goals.
26. The leader defines role responsibilities for each group member.
27. Evaluations of group members are used.
28. The leader communicates with group members.
29. The leader shows flexibility in making decisions.
30. Group members are comfortable talking to the leader about tasks.
31. The leader acts friendly with members of the group.
32. The leader tells group members what they are supposed to do.
33. The leader behaves in a predictable manner toward group members.
34. The leader sets standards of performance for group members.
35. The leader encourages group members to do quality work.

## Appendix E

1. I show confidence in my group members.
2. Group members' ideas are sought.
3. I have trust in my group members.
4. It is the whole group's responsibility to achieve the organization's goals.
5. Decisions are made as a group.
6. Group members' ideas are used constructively.
7. The group establishes organizational goals.
8. My group members are comfortable talking to me about tasks.
9. I help group members get along.
10. I act friendly with members of the group.
11. I help others feel comfortable in the group.
12. I show concern for the personal well-being of others.
13. I make suggestions about how to solve problems.
14. I respond favorably to suggestions made by others.
15. I treat others fairly.
16. I behave in a predictable manner toward group members.
17. I communicate with group members.
18. I show flexibility in making decisions.

## Appendix F

1. I use fear to get tasks accomplished.
2. I clarify my own role within the group.
3. I use threats when necessary.
4. I encourage group members to do quality work.
5. I set standards of performance for group members.
6. I use punishment in my leadership style.
7. I make the decisions.
8. I complete review functions without the input of my group members.
9. There is resistance to my leadership.
10. I provide criteria for what is expected of the group.
11. I show little confidence in my group members.
12. I dictate group goals.
13. I tell group members what they are supposed to do.
14. I make my perspective clear to others.
15. I develop a plan of action for the group.
16. I define role responsibilities for each group member.
17. I provide a plan for how the work is to be done.

## Appendix G

1. I show confidence in my group members.
2. Group members' ideas are sought.
3. I have trust in my group members.
4. It is the whole group's responsibility to achieve the organization's goals.
5. Decisions are made as a group.
6. Group members' ideas are used constructively.
7. The group establishes organizational goals.
8. My group members are comfortable talking to me about tasks.
9. I help group members get along.
10. I act friendly with members of the group.
11. I help others feel comfortable in the group.
12. I show concern for the personal well-being of others.
13. I make suggestions about how to solve problems.
14. I respond favorably to suggestions made by others.
15. I treat others fairly.
16. I behave in a predictable manner toward group members.
17. I communicate with group members.
18. I show flexibility in making decisions.
19. I use fear to get tasks accomplished.
20. I clarify my own role within the group.
21. I use threats when necessary.
22. I encourage group members to do quality work.
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28. I provide criteria for what is expected of the group.
29. I show little confidence in my group members.
30. I dictate group goals.
31. I tell group members what they are supposed to do.
32. I make my perspective clear to others.
33. I develop a plan of action for the group.
34. I define role responsibilities for each group member.
35. I provide a plan for how the work is to be done.

## Appendix H

1. I feel that I know a lot more than most leaders about what it takes to be a good leader.
2. I know what it takes to make a work group accomplish its tasks.
3. In general, I am very good at leading a group of my peers.
4. I am confident of my ability to influence a work group that I lead.
5. I know what it takes to keep a work group running smoothly.
6. I know how to encourage good work group performance.
7. I feel comfortable allowing most group members to contribute to the task when I am leading a work group.
8. Overall, I believe that I can lead a work group successfully.

## Appendix I

1. It is important for me to be selected as a group leader.
2. Leadership is important to me.
3. I am a good leader.
4. Leadership skills will be important to my career.
5. I am a leadership-oriented person.
6. I have the ability to be a qualified leader.
7. I have the ability to perform as a leader.

## Appendix J

1. I intend to hold a leadership position after graduation.
2. I hope to be a leader in my community.
3. I would like to have a leadership position during my career.
4. I am prepared to lead after college.
5. I plan to hold future leadership positions.

## Appendix K

### Introduction

Hi, my name is Aly Emrick and I'm currently gathering data for my senior honors thesis for the Jepson School of Leadership Studies. The data attained from this survey research will not only help me but will benefit the University as well by providing information on the controversial topic of the coordinate system and the leadership positions it creates.

All those who participate will be entered in a raffle to win an iPod Nano as well as a number of \$50 gift certificates to restaurants around Richmond.

### Who's Eligible to Respond

Leaders of this organization

Those members who do not hold any formal positions of leadership on campus

### Instructions

Please fill out the packet of questionnaires beginning with the first page. Complete all of the questions in silence and to the best of your ability. All of the scales used run from either -3 to +3 or -4 to +4. Please also note that most pages are double sided. Please be completely honest by not overrating or devaluing your attributes as this data will be beneficial to our University and will be kept completely anonymous. When you are finished please turn your packet over and wait for further instructions from me. Thank you, you may begin.

### Conclusion

Please raise your hand if you need a few more minutes.

Thank you for your time and honest answers. You will all be entered in a raffle for an iPod nano and \$50 gift certificates. If you are one of the winners, you will be emailed by me. Thank you again and have a great night.



## Appendix L

*Below is an e-mail that was sent to all of the women of Westhampton College Government Association, the all female student government here on campus, prior to their first meeting of the year.*

Hi. My name is Ashley and I will be your group leader this year. In order to ensure that we are successful and receive grant money from the deanery, I will automatically choose four people from the group to devote extra time to each of our projects this year. I will not consult anyone about my decision, so you will not have a say in whether you make the time investment or not. For each project I will simply choose four members and will let you know which group members will be contributing. I will do this to make sure we are awarded the grant money at the end of the year.

Please indicate the extent to which **you agree with** each of the following statements. Please write the number corresponding to your answer on the line next to each item using the following scale:

Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Agree	Strongly Agree
-3	-2	-1	0	1	2	3

- \_\_\_\_\_ 1. I would like to be a member of this group.
- \_\_\_\_\_ 2. I would feel comfortable approaching this leader with questions.
- \_\_\_\_\_ 3. This leader is effective.
- \_\_\_\_\_ 4. This leader is disagreeable.
- \_\_\_\_\_ 5. I would feel uneasy approaching this leader with concerns.
- \_\_\_\_\_ 6. This leader is likable.
- \_\_\_\_\_ 7. This leader is independent.
- \_\_\_\_\_ 8. Her leadership style is appropriate.
- \_\_\_\_\_ 9. The leader is warm.
- \_\_\_\_\_ 10. I would be dissatisfied with this leader.
- \_\_\_\_\_ 11. Tasks will be accomplished under her leadership.
- \_\_\_\_\_ 12. This leader is competent.
- \_\_\_\_\_ 13. This leader is a good listener.
- \_\_\_\_\_ 14. A female leader is well suited to lead this organization.
- \_\_\_\_\_ 15. A male leader would be well suited to lead this organization.

**Please Circle Your Answer:**

I) Sex:            Male                      Female

II) Year:            First                      Second                      Third                      Fourth                      Fifth

III a) Do you hold a leadership position on the University of Richmond Campus?    Yes            No  
       b) If so, is it in a coeducational or single sex organization? Coeducational    Single Sex    Both

*Below is an e-mail that was sent to all of the men and women of the College Government Association, the coeducational student government, prior to their first meeting of the year.*

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- \_\_\_\_\_ 10. I would be dissatisfied with this leader.
- \_\_\_\_\_ 11. Tasks will be accomplished under her leadership.
- \_\_\_\_\_ 12. This leader is competent.
- \_\_\_\_\_ 13. This leader is a good listener.
- \_\_\_\_\_ 14. A female leader is well suited to lead this organization.
- \_\_\_\_\_ 15. A male leader would be well suited to lead this organization.

**Please Circle Your Answer:**

I) Sex:            Male                      Female

II) Year:            First                      Second                      Third                      Fourth                      Fifth

III a) Do you hold a leadership position on the University of Richmond Campus?    Yes            No  
       b) If so, is it in a coeducational or single sex organization?    Coeducational    Single Sex    Both

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- \_\_\_\_ 11. Tasks will be accomplished under her leadership.
- \_\_\_\_ 12. This leader is competent.
- \_\_\_\_ 13. This leader is a good listener.
- \_\_\_\_ 14. A female leader is well suited to lead this organization.
- \_\_\_\_ 15. A male leader would be well suited to lead this organization.

**Please Circle Your Answer:**

I) Sex:            Male                      Female

II) Year:            First                      Second                      Third                      Fourth                      Fifth

III a) Do you hold a leadership position on the University of Richmond Campus?    Yes            No

b) If so, is it in a coeducational or single sex organization?    Coeducational    Single Sex    Both

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Hi. My name is Matthew and I will be your group leader this year. In order to ensure that we are successful and receive grant money from the deanery, I will automatically choose four people from the group to devote extra time to each of our projects this year. I will not consult anyone about my decision, so you will not have a say in whether you make the time investment or not. For each project I will simply choose four members and will let you know which group members will be contributing. I will do this to make sure we are awarded the grant money at the end of the year.

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- \_\_\_\_\_ 15. A female leader would be well suited to lead this organization.

**Please Circle Your Answer:**

I) Sex:            Male                      Female

II) Year:            First                      Second                      Third                      Fourth                      Fifth

III a) Do you hold a leadership position on the University of Richmond Campus?    Yes            No

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**Please Circle Your Answer:**

I) Sex:            Male            Female

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**Please Circle Your Answer:**

I) Sex:            Male            Female

II) Year:           First            Second            Third            Fourth            Fifth

III a) Do you hold a leadership position on the University of Richmond Campus?    Yes    No  
       b) If so, is it in a coeducational or single sex organization?    Coeducational    Single Sex    Both

*Below is an e-mail that was sent to all of the women and men (or men and women) of the College Government Association, the coeducational student government, prior to their first meeting of the year.*

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